

10/521,646

=> d his

(FILE 'HOME' ENTERED AT 14:59:03 ON 08 AUG 2007)

FILE 'CAPLUS' ENTERED AT 14:59:21 ON 08 AUG 2007

L1 1 S US20060040920/PN
SELECT RN L1 1-

FILE 'REGISTRY' ENTERED AT 14:59:35 ON 08 AUG 2007

L2 17 S E1-17
L3 7 S L2 AND 5-6-7/SZ
L4 10 S L2 NOT L3
L5 7 S L4 NOT (AMMONIA OR TRICHLORO OR PROPANONE)

FILE 'CAPLUS' ENTERED AT 15:02:06 ON 08 AUG 2007

L6 2105 S L3

FILE 'REGISTRY' ENTERED AT 15:03:27 ON 08 AUG 2007

L7 6 S L3 NOT 132539-06-1/RN
L8 1 S 132539-06-1/RN

FILE 'CAPLUS' ENTERED AT 15:03:49 ON 08 AUG 2007

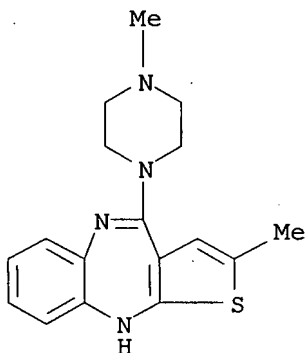
L9 2104 S L8
L10 2 S L7
L11 256096 S L5
L12 51 S L9 AND L11

=> d scan 18

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

10/521,646

L8 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
MF C17 H20 N4 S
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

10/521,646

=> d ibib abs hitstr total 110

10/521,646

L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:159389 CAPLUS

DOCUMENT NUMBER: 146:316350

TITLE: Crystal structure of olanzapine and its solvates. Part 3. Two and three-component solvates with water, ethanol, butan-2-ol and dichloromethane

AUTHOR(S): Wawrzycka-Gorczyca, Irena; Borowski, Piotr; Osypiuk-Tomasik, Joanna; Mazur, Liliana; Koziol, Anna E.

CORPORATE SOURCE: Faculty of Chemistry, Department of Crystallography, Maria Curie-Sklodowska University, Lublin, 20-031, Pol.

SOURCE: Journal of Molecular Structure (2007), 830(1-3), 188-197

CODEN: JMOSB4; ISSN: 0022-2860

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Crystalline solvates of olanzapine (1),

2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, have been characterized by an X-ray anal. and thermal (DSC) data. Crystallization of 1 from ethanol gives a solid containing both water and ethanol mols.; the solvate 1·H₂O·EtOH (2:2:1) is monoclinic with the space group P2₁/c and the unit-cell volume V = 3752.8(12) Å³. Butan-2-ol forms with 1 solvate which is also a three-component phase, 1·H₂O·BuOH, but its stoichiometry is different (1:1:1). The space group for this crystal is P2₁/c and the unit-cell volume V = 2216.5(7) Å³. Crystalline olanzapine dichloromethane solvate (2:1), 1·CH₂Cl₂, is triclinic with the space group P.hivin.1. The characteristic feature of all crystal structures is presence of a pair of olanzapine mols. which form dimer stabilized by multiple weak C-H... π interactions between the N-methylpiperazine fragment and the Ph / thiophene systems. Theor. calcns. have been performed indicating that the total C-H... π binding energy is about 8 kcal mol⁻¹. In the crystal structure, the self-assembled olanzapine mol. dimers are arranged into parallel crystal planes. Packing of the layers proceeds in two ways in which structural motives are replicated by (i) perpendicular translation forming columns, and (ii) rotation around the twofold screw axis (parallel to the layer).

IT 647826-03-7

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(crystallog. and thermal desolvation; crystal structure olanzapine two- and three-component solvates with water, ethanol, butan-2-ol and dichloromethane)

RN 647826-03-7 CAPLUS

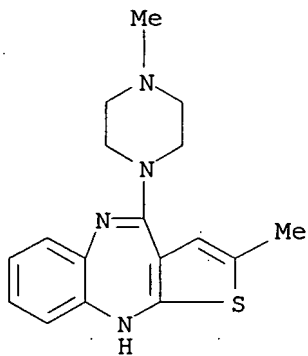
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (2:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

10/521,646



CM 2

CRN 75-09-2
CMF C H2 Cl2

Cl-CH₂-Cl

REFERENCE COUNT:

38

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

APPL. ACCESSION NUMBER: 2004:60321 CAPLUS

DOCUMENT NUMBER: 140:117363

TITLE: Preparation of polymorphic forms of olanzapine from its solvates

INVENTOR(S): Kotar, Jordan Berta; Vrečer, Franc; Grcman, Marija

PATENT ASSIGNEE(S): Krka, D.D. Novo Mesto, Slovenia

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

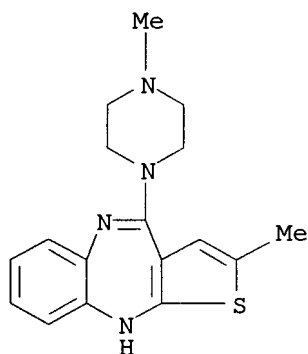
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2004006933 | A2 | 20040122 | WO 2003-SI24 | 20030714 |
| WO 2004006933 | A3 | 20040401 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| SI 21270 | A | 20040229 | SI 2002-175 | 20020715 |
| CA 2493370 | A1 | 20040122 | CA 2003-2493370 | 20030714 |
| AU 2003256242 | A1 | 20040202 | AU 2003-256242 | 20030714 |
| EP 1551414 | A2 | 20050713 | EP 2003-764287 | 20030714 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| US 2006040920 | A1 | 20060223 | US 2005-521646 | 20050113 |
| NO 2005000720 | A | 20050210 | NO 2005-720 | 20050210 |
| IN 2005CN00184 | A | 20070330 | IN 2005-CN184 | 20050214 |
| PRIORITY APPLN. INFO.: | | | SI 2002-175 | A 20020715 |
| | | | WO 2003-SI24 | W 20030714 |
| AB | The invention relates to a process for the preparation of form I of olanzapine, crystallized from a solvent mixture which comprises 2-propanol, some pseudopolymorphic forms, namely solvates of olanzapine, a new polymorphic form A of olanzapine, and processes for the preparation thereof. For example, form A of olanzapine was prepared by suspending 10.0g olanzapine in 30 mL acetonitrile, adding 35mL methylene chloride in heated suspension, and drying under vacuum at 60°C. | | | |
| IT | 647825-99-8 647826-00-4 647826-01-5 647826-02-6 647826-03-7 647826-04-8 RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative) (preparation of polymorphic forms of olanzapine from its solvates) | | | |
| RN | 647825-99-8 CAPLUS | | | |
| CN | 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with acetonitrile and dichloromethane, hydrate (9CI) (CA INDEX NAME) | | | |

CM 1

10/521,646

CRN 132539-06-1
CMF C17 H20 N4 S



CM 2

CRN 75-09-2
CMF C H2 Cl2

Cl-CH₂-Cl

CM 3

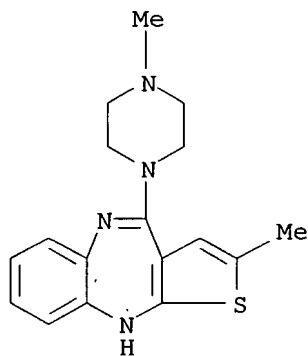
CRN 75-05-8
CMF C2 H3 N

H₃C-C≡N

RN 647826-00-4 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
, compd. with acetonitrile (2:1), dihydrate (9CI) (CA INDEX NAME)

CM 1

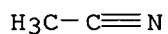
CRN 132539-06-1
CMF C17 H20 N4 S



CM 2

CRN 75-05-8

CMF C2 H3 N



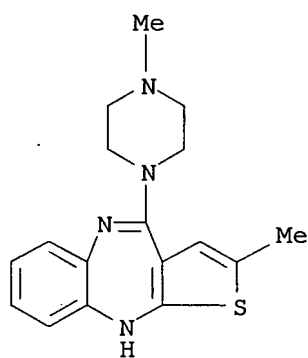
RN 647826-01-5 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with acetonitrile and dichloromethane (6:3:1), hexahydrate (9CI)
(CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 75-09-2

CMF C H2 C12

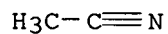
10/521,646



CM 3

CRN 75-05-8

CMF C2 H3 N



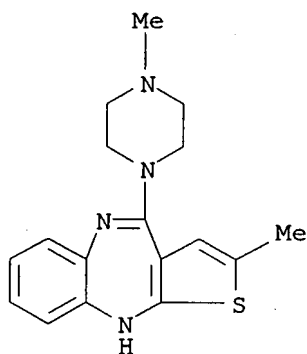
RN 647826-02-6 CAPLUS

CN 2-Propanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 132539-06-1

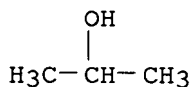
CMF C17 H20 N4 S



CM 2

CRN 67-63-0

CMF C3 H8 O



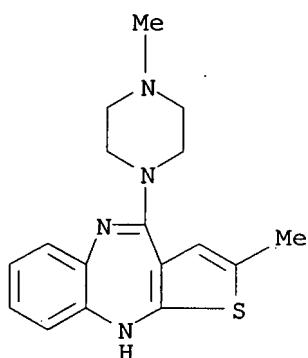
RN 647826-03-7 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (2:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

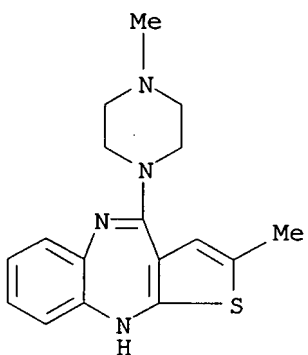
CRN 75-09-2
CMF C H2 Cl2

Cl-CH₂-Cl

RN 647826-04-8 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
, compd. with dichloromethane (6:1) (9CI) (CA INDEX NAME)

CM 1

CRN 132539-06-1
CMF Cl7 H20 N4 S



CM 2

CRN 75-09-2
CMF C H2 Cl2

10/521,646

Cl-CH₂-Cl

10/521,646

=> d ibib abs hitstr total 112

L12 ANSWER 1 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:819070 CAPLUS

TITLE: Novel polymorph E of olanzapine and preparation of anhydrous non-solvated crystalline polymorphic form I of 2-methyl-4(4-methyl-1-piperazinyl)-10h-thieno[2,3-b][1,5] benzodiazepine (olanzapine form i) from the polymorphic olanzapine form e

INVENTOR(S): Ray, Anup Kumar; V. Patel, Hiren Kumar; Ludescher, Johannes; Patel, Mahendra R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 13pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2007173496 | A1 | 20070726 | US 2006-340284 | 20060126 |
| WO 2007087555 | A2 | 20070802 | WO 2007-US60958 | 20070124 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2006-340284 A 20060126

AB The invention provides an Olanzapine pseudopolymorph Form E. The invention provides methods of preparing polymorphic Olanzapine Form E employing rapid crystallization and seeding. The invention provides methods of preparing anhydrous

Olanzapine Form I from the Olanzapine Form E by step-wise drying.

IT INDEXING IN PROGRESS

IT 67-63-0, Isopropanol 67-68-5, Dimethyl sulfoxide

75-09-2, Dichloromethane

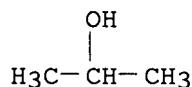
RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(polymorph E of olanzapine and preparation of anhydrous non-solvated crystalline

polymorphic form I of 2-methyl-4(4-methyl-1-piperazinyl)-10h-thieno[2,3-b][1,5] benzodiazepine (olanzapine form I) from polymorphic olanzapine form E)

RN 67-63-0 CAPLUS

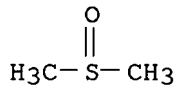
CN 2-Propanol (CA INDEX NAME)



RN 67-68-5 CAPLUS

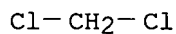
10/521,646

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)



IT 132539-06-1P, Olanzapine

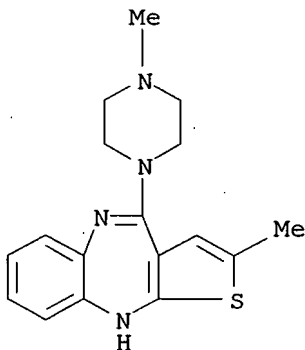
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)
(polymorph E of olanzapine and preparation of anhydrous non-solvated

crystalline

polymorphic form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10h-thieno[2,3-b][1,5] benzodiazepine (olanzapine form I) from polymorphic olanzapine form E)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



~~112~~ ANSWER 2 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:761505 CAPLUS
 DOCUMENT NUMBER: 147:150819
 TITLE: Method for preparing a mixed solvate of olanzapine
 INVENTOR(S): Dalmases Barjoan, Pere; Herbera Espinal, Reyes
 PATENT ASSIGNEE(S): Inke, S.A., Spain
 SOURCE: PCT Int. Appl., 17pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2007077134 | A1 | 20070712 | WO 2006-EP70028 | 20061220 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

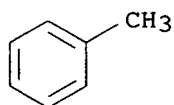
PRIORITY APPLN. INFO.: ES 2006-59 A 20060105

AB An improved method is provided for preparing a mixed solvate of olanzapine/water/tetrahydrofuran in a proportion of 1:1:1/2. The improvement is characterized in that the mixed solvate is basically prepared by means of methylation of the N-desmethyloanzapine with di-Me sulfate, using THF and water as solvents.

IT 108-88-3, Toluene, uses 109-99-9, Tetrahydrofuran, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (method for preparing mixed solvate of olanzapine)

RN 108-88-3 CAPLUS

CN Benzene, methyl- (CA INDEX NAME)



RN 109-99-9 CAPLUS

CN Furan, tetrahydro- (CA INDEX NAME)



IT 132539-06-1P, Olanzapine

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);

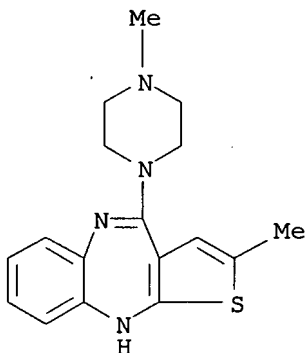
10/521,646

BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)

(method for preparing mixed solvate of olanzapine)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

112 ANSWER 3 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:621955 CAPLUS

DOCUMENT NUMBER: 147:46090

TITLE: Induction of Cyplal is a nonspecific biomarker of aryl hydrocarbon receptor activation: results of large scale screening of pharmaceuticals and toxicants in vivo and in vitro

AUTHOR(S): Hu, Wenyue; Sorrentino, Claudio; Denison, Michael S.; Kolaja, Kyle; Fielden, Mark R.

CORPORATE SOURCE: Iconix Biosciences, Mountain View, California, Department of Environmental Toxicology, University of California Davis, Davis, CA, USA

SOURCE: Molecular Pharmacology (2007), 71(6), 1475-1486

CODEN: MOPMA3; ISSN: 0026-895X

PUBLISHER: American Society for Pharmacology and Experimental Therapeutics

DOCUMENT TYPE: Journal

LANGUAGE: English

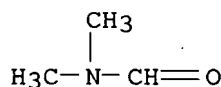
AB Expression of Cyplal and its related enzyme activity have long been used as a biomarker for aryl hydrocarbon receptor (AhR) activation and a warning of dioxin-like toxicity. As a result, induction of Cyplal by pharmaceutical drug candidates or environmental contaminants raises significant concern in risk assessment. The current study evaluates the specificity of Cyplal induction as a marker for AhR affinity and activation and provides context to assess the relevancy of AhR activation to risk assessment. In vivo expts. examined the expression of Cyplal and other AhR-regulated genes in liver, kidney, and heart in response to 596 compds. From this data set, a subset of 147 compds. was then evaluated for their ability to activate or bind to the AhR using a combination of gel shift, reporter gene, and competitive receptor binding assays. Whereas in vivo Cyplal mRNA expression is a sensitive marker for AhR activation, it lacks specificity, because 81 (59%) of 137 compds. were found to significantly induce Cyplal in vivo but were not verified to bind or activate the AhR in vitro. Combining in vivo and in vitro findings, we identified nine AhR agonists, six of which are marketed therapeutics and have been approved by the U.S. Food and Drug Administration, including leflunomide, flutamide, and nimodipine. These drugs do not produce dioxin-like toxicity in rats or in humans. These data demonstrate that induction of Cyplal is a nonspecific biomarker of direct AhR affinity and activation and lend further support to the hypothesis that Cyplal induction and/or AhR activation is not synonymous with dioxin-like toxicity.

IT 68-12-2, N,N-Dimethylformamide, biological studies
132539-06-1, Olanzapine

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(use of Cyplal induction as nonspecific biomarker of aryl hydrocarbon receptor activation for screening of pharmaceuticals and toxicants)

RN 68-12-2 CAPLUS

CN Formamide, N,N-dimethyl- (CA INDEX NAME)

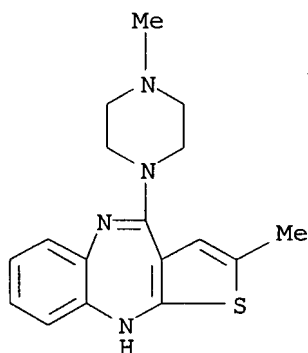


RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

10/521,646

(CA INDEX NAME)



REFERENCE COUNT:

38

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

112 ANSWER 4 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:540907 CAPLUS

TITLE: Changing patterns of drug and alcohol use in fatally injured drivers in Washington state

AUTHOR(S): Schwilke, Eugene W.; Sampaio dos Santos, Maria Isabel; Logan, Barry K.

CORPORATE SOURCE: Forensic Laboratory Services Bureau, Washington State Patrol, Washington State Toxicology Laboratory, Seattle, WA, 98134, USA

SOURCE: Journal of Forensic Sciences (2006), 51(5), 1191-1198
CODEN: JFSCAS; ISSN: 0022-1198

PUBLISHER: Blackwell Publishing, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We have previously reported on patterns of drug and alc. use in fatally injured drivers in Washington State. Here we revisit that population to examine how drug use patterns have changed in the intervening 9 years. Blood and serum specimens from drivers who died within 4 h of a traffic accident between Feb. 1, 2001, and Jan. 31, 2002, were analyzed for illicit and therapeutic drugs and alc. Drugs when present were quantitated. Samples suitable for testing were obtained from 370 fatally injured drivers. Alc. was detected above 0.01 g/100 mL in 41% of cases. The mean alc. concentration for those cases was 0.17 g/100 mL (range 0.02-0.39 g/100 mL). Central nervous system (CNS) active drugs were detected in 144 (39%) cases. CNS depressants including carisoprodol, diazepam, hydrocodone, diphenhydramine, amitriptyline, and others were detected in 52 cases (14.1%), cannabinoids were detected in 47 cases (12.7%), CNS stimulants (cocaine and amphetamines) were detected in 36 cases (9.7%), and narcotic analgesics (excluding morphine which is often administered iatrogenically in trauma cases) were detected in 12 cases (3.2%). For those cases which tested pos. for alc. c. 40% had other drugs present which have the potential to cause or contribute to the driver's impairment. Our report also considers the blood drug concns. in the context of their interpretability with respect to driving impairment. The data reveal that over the past decade, while alc. use has declined, some drug use, notably methamphetamine, has increased significantly (from 1.89% to 4.86% of fatally injured drivers) between 1992 and 2002. Combined drug and alc. use is a very significant pattern in this population and is probably overlooked in DUI enforcement programs.

IT INDEXING IN PROGRESS

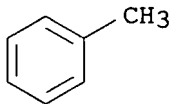
IT 108-88-3, Toluene 132539-06-1, Olanzapine

RL: ADV (Adverse effect, including toxicity); ANT (Analyte); ANST (Analytical study); BIOL (Biological study)

(pattern changes of drug and alc. use in fatally injured drivers in Washington state)

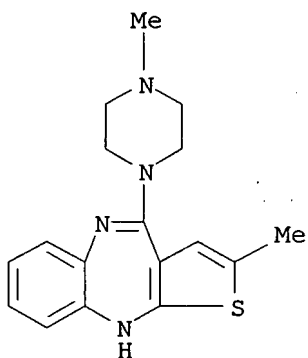
RN 108-88-3 CAPLUS

CN Benzene, methyl- (CA INDEX NAME)



RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



REFERENCE COUNT:

32

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

L12 ANSWER 5 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:538023 CAPLUS

DOCUMENT NUMBER: 146:507833

TITLE: Process for the preparation of olanzapine for dosage forms

INVENTOR(S): Kovanyine Lax, Gyoergyi; Nemeth, Gabor; Krasznai, Gyoergy; Mesterhazy, Norbert; Nagy, Kalman; Vereczkeyne Donath, Gyoergyi; Szent-Kirallyi, Zsuzsanna

PATENT ASSIGNEE(S): Egis Gyogyszergyar Nyrt., Hung.

SOURCE: PCT Int. Appl., 41pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2007054750 | A2 | 20070518 | WO 2006-HU96 | 20061110 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |

PRIORITY APPLN. INFO.:

HU 2005-1046

A 20051111

AB The invention relates to a process for the preparation of olanzapine by reacting 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride with N-methylpiperazine in an organic solvent having good phys. properties and suitable in respect of environmental and labour safety consideration, i.e., a mixture of toluene and 1,3-dimethyl-2-imidazolidinone. The invention also encompasses novel olanzapine dihydrochloride trihydrate, the preparation thereof and pharmaceutical compns. comprising the novel compound

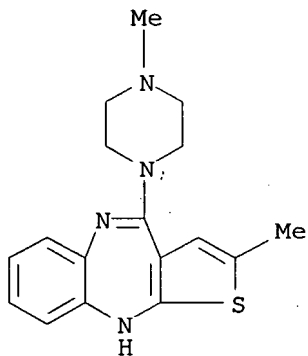
IT 132539-06-1P, Olanzapine

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

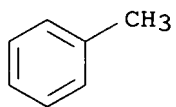
(preparation of olanzapine using aminomethylthienobenzodiazepine for dosage forms)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



IT 108-88-3, Toluene, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (preparation of olanzapine using aminomethylthienobenzodiazepine for dosage forms)
 RN 108-88-3 CAPLUS
 CN Benzene, methyl- (CA INDEX NAME)



10/521,646

112 ANSWER 6 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:484935 CAPLUS

DOCUMENT NUMBER: 146:468572

TITLE: Organic nanoparticles and associated methods

INVENTOR(S): Farr, Isaac; Cartagena, Julio

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 7pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

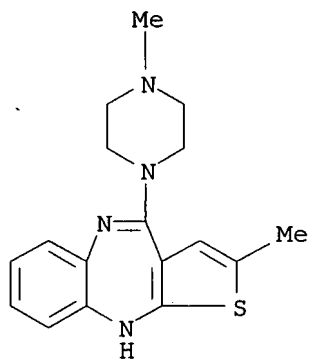
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|----------|
| US 2007098802 | A1 | 20070503 | US-2005-263725 | 20051031 |
| PRIORITY APPLN. INFO.: | | | US 2005-263725 | 20051031 |
| AB | Methods of preparing organic nanoparticles are provided. Such methods can include generating a mixture of an organic material, a first liquid, and a second liquid, wherein the organic material is more soluble in the second liquid than in the first liquid. The methods can also include adding a third liquid to the mixture which causes the mixture to form an emulsion. Such an emulsion can have a continuous phase including the first liquid and a discontinuous phase including the organic material and the second liquid. The organic material can be precipitated to form organic nanoparticles and the second liquid can diffuse into the continuous phase. A 0.5% mixture of 5 mg/mL of glyburide in 70% ethanol and 30% chloroform by weight was prepared. To this mixture, water was added until clouding is observed at which point the emulsion has formed. Light scattering and SEM show the resulting nanoparticle size is on average about 500 nm. A few large nanoparticles may be observed of up to 1 to 3 μ m. | | | |
| IT | 75-09-2, Methylene chloride, uses RL: NUU (Other use, unclassified); USES (Uses) (organic nanoparticles and associated methods) | | | |
| RN | 75-09-2 CAPLUS | | | |
| CN | Methane, dichloro- (CA INDEX NAME) | | | |

Cl-CH₂-Cl

IT 132539-06-1, Olanzapine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(organic nanoparticles and associated methods)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



~~L12~~ ANSWER 7 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:328200 CAPLUS
 DOCUMENT NUMBER: 146:344231
 TITLE: Organic acid salts of olanzapine and their preparation
 INVENTOR(S): Kozluk, Thomasz
 PATENT ASSIGNEE(S): Pol.
 SOURCE: PCT Int. Appl., 24pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2007032695 | A1 | 20070322 | WO 2006-PL25 | 20060504 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: PL 2005-377084 A 20050915

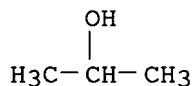
AB New salts which comprise salts of olanzapine and carboxylic acids selected from the group consisting of: maleic acid, fumaric acid, phthalic acid, benzoic acid, salicylic acid or acetylsalicylic acid, of olanzapine to acid ratio of 1:1, 1:2 or other are prepared New salts of olanzapine and monoesters of dicarboxylic acids obtained in reaction of olanzapine with anhydrides selected from the group consisting of maleic anhydride, phthalic anhydride and succinic anhydride are presented. Synthesis of new olanzapine salts comprises carrying out the reaction of olanzapine in organic solvents with the carboxylic acids. NMR, X-ray diffraction and IR data are given for the salts.

IT 67-63-0, Isopropanol, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (carboxylic acid salts of olanzapine and their preparation)

RN 67-63-0 CAPLUS

CN 2-Propanol (CA INDEX NAME)

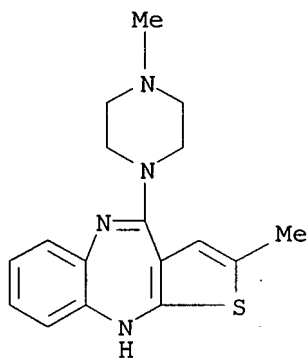


IT 132539-06-1, Olanzapine

RL: RCT (Reactant); RACT (Reactant or reagent)
 (carboxylic acid salts of olanzapine and their preparation)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
 (CA INDEX NAME)



REFERENCE COUNT:

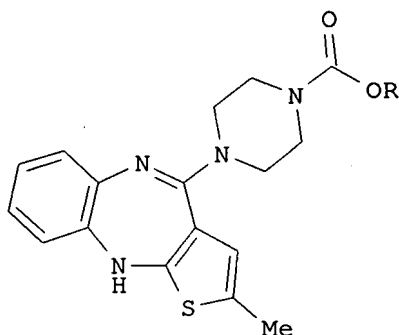
5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

12 ANSWER 8 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:265943 CAPLUS
 DOCUMENT NUMBER: 146:380021
 TITLE: Preparation and application of Olanzapine intermediate
 INVENTOR(S): Tang, Chaojun; Yao, Chengzhi; Jia, Cunchao
 PATENT ASSIGNEE(S): Hangzhou Shengmei Pharmaceutical Co., Ltd., Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 13pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

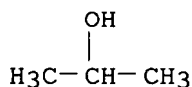
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|---------------------|------------------|----------|
| CN 1923834 | A | 20070307 | CN 2006-10053509 | 20060911 |
| PRIORITY APPLN. INFO.: | | | CN 2006-10053509 | 20060911 |
| OTHER SOURCE(S): | | CASREACT 146:380021 | | |
| GI | | | | |



AB The title Olanzapine intermediate has a general formula I (R = C1-C6 alkyl, C6-C18 aryl, heteroaryl, or benzyl). This Olanzapine intermediate can be used to prepare Olanzapine with the advantages of high Olanzapine yield, safe operation, low pollution on environment, etc.

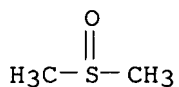
IT 67-63-0, Isopropanol, uses 67-68-5, DMSO, uses 68-12-2, DMF, uses 75-09-2, Methylene chloride, uses 108-88-3, Toluene, uses 109-99-9, THF, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (preparation and application of Olanzapine intermediate)

RN 67-63-0 CAPLUS
 CN 2-Propanol (CA INDEX NAME)

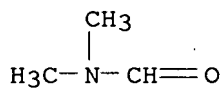


RN 67-68-5 CAPLUS
 CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)

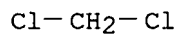
10/521,646



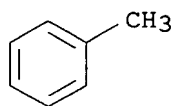
RN 68-12-2 CAPLUS
CN Formamide, N,N-dimethyl- (CA INDEX NAME)



RN 75-09-2 CAPLUS
CN Methane, dichloro- (CA INDEX NAME)



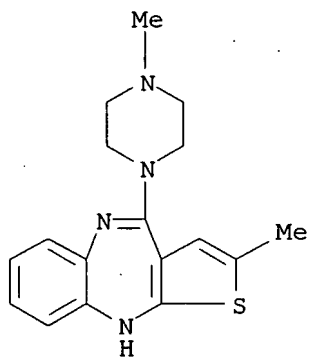
RN 108-88-3 CAPLUS
CN Benzene, methyl- (CA INDEX NAME)



RN 109-99-9 CAPLUS
CN Furan, tetrahydro- (CA INDEX NAME)



IT 132539-06-1P, Olanzapine
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and application of Olanzapine intermediate)
RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



10/521,646

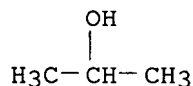
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L12 ANSWER 9 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:181157 CAPLUS
DOCUMENT NUMBER: 146:507560
TITLE: Hydrated form of olanzapine and process for
preparation thereof
INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh
PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India
SOURCE: Indian Pat. Appl., 18pp.
CODEN: INXXBQ
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| IN 2002MA00496 | A | 20050304 | IN 2002-MA496 | 20020701 |
| PRIORITY APPLN. INFO.: | | | IN 2002-MA496 | 20020701 |

AB The object of the present invention is to provide the novel crystalline forms of olanzapine monohydrate. The present invention also provides a process for the preparation of novel olanzapine monohydrate. The process for the preparation of these hydrated forms comprises the dissoln. of crystalline Form of olanzapine in a mixture of water and an alc. using trifluoroacetic acid and further adjusting the pH of the mass towards basic with a known base to afford the hydrated forms of olanzapine. The present process is simple, eco-friendly and well suited for industrial scale up.

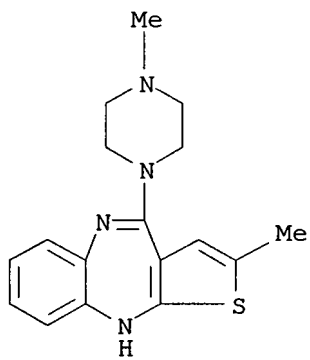
IT 67-63-0, Isopropanol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hydrated form of olanzapine and process for preparation thereof)

RN 67-63-0 CAPLUS
CN 2-Propanol (CA INDEX NAME)



IT 132539-06-1, Olanzapine
RL: PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(hydrated form of olanzapine and process for preparation thereof)

RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



L12 ANSWER 10 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

X ACCESSION NUMBER: 2006:1005866 CAPLUS
 DOCUMENT NUMBER: 145:363423
 TITLE: Process for preparing crystalline form I of olanzapine
 INVENTOR(S): Sundaram, Venkataraman; Pandurang, Sharat Narsapur;
 Dayaram, Vishal Parmar; Bommareddy, Siva Kumar Reddy;
 Sitaram, Hitendra Chaudhary
 PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India; Dr. Reddy's
 Laboratories, Inc.
 SOURCE: PCT Int. Appl., 22pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2006102176 | A2 | 20060928 | WO 2006-US9911 | 20060320 |
| WO 2006102176 | A3 | 20070118 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
 KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
 MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
 VN, YU, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: IN 2005-CH291 A 20050321
 US 2005-677115P P 20050503

AB A process for preparing olanzapine Form I comprises: cooling a concentrated solution

of olanzapine; isolating wet crystals of olanzapine Form I; and drying wet
 crystals and recovering olanzapine Form I. Drying can be conducted by
 stepwise increases in the drying temps., with extended holding times at
 each temperature condition. Olanzapine monohydrate was mixed with methylene
 chloride and the suspension was heated to obtain a clear solution and the
 resultant solution was filtered through a perlite bed in a and the filtrate
 was vacuum distilled to give the crystalline form I of olanzapine.

IT 75-09-2, Methylene chloride, uses

RL: NUU (Other use, unclassified); USES (Uses)

(process for preparing crystalline form I of olanzapine)

RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)

Cl-CH₂-Cl

IT 132539-06-1, Olanzapine

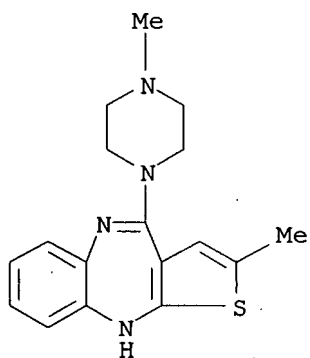
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(process for preparing crystalline form I of olanzapine)

RN 132539-06-1 CAPLUS

10/521,646

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



10/521,646

L12 ANSWER 11 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:980087 CAPLUS

DOCUMENT NUMBER: 145:342506

TITLE: Controlled release implant comprising biocompatible polymer for ocular delivery

INVENTOR(S): Dadey, Eric; Lindemann, Christopher M.; Warren, Stephen L.; Norton, Richard L.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 36pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| US 2006210604 | A1 | 20060921 | US 2005-244438 | 20051004 |
| PRIORITY APPLN. INFO.: | | | US 2004-615727P | P 20041004 |
| | | | US 2004-628630P | P 20041117 |
| | | | US 2004-629133P | P 20041118 |

AB The present invention provides a flowable composition suitable for use as a controlled-release implant. The flowable composition can be administered into the ocular region of a mammal. The composition includes: (a) a biodegradable, biocompatible thermoplastic polymer that is at least substantially insol. in aqueous medium, water or body fluid; (b) a biol. agent, a metabolite thereof, a biol. agent acceptable salt thereof, or a prodrug thereof; and (c) a biocompatible organic liquid, at standard temperature and pressure, in which the

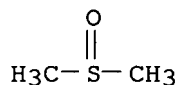
thermoplastic polymer is soluble The present invention also provides methods of medical treatment that include administering the flowable composition into the ocular region of a mammal. For example, Atrigel intravitreal injection was prepared containing poly(lactide-co-glycolide) 15% in PEG.

IT 67-68-5, Methyl sulfoxide, biological studies 68-12-2, Dimethylformamide, biological studies 109-99-9, Tetrahydrofuran, biological studies 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release implant comprising biocompatible polymer for ocular delivery)

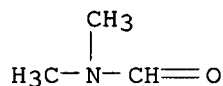
RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 68-12-2 CAPLUS

CN Formamide, N,N-dimethyl- (CA INDEX NAME)



RN 109-99-9 CAPLUS

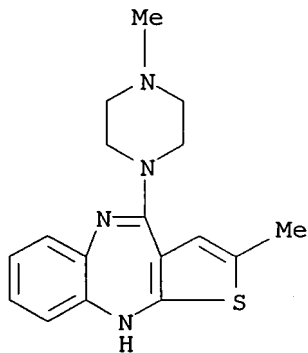
10/521,646

CN Furan, tetrahydro- (CA INDEX NAME)



RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



L12 ANSWER 12 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:817672 CAPLUS

DOCUMENT NUMBER: 145:249105

TITLE: Preparation of 1-[3-[3-(4-chlorophenyl)propoxy]propyl]piperidine monohydrochloride as a histamine H3 receptor ligand.

INVENTOR(S): Raga, Manuel, M.; Sallares, Juan; Guerrero, Marta; Guglietta, Antonio

PATENT ASSIGNEE(S): Ferrer Internacional, S. A., Spain.

SOURCE: PCT Int. Appl., 45pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2006084833 | A1 | 20060817 | WO 2006-EP50703 | 20060206 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| EP 1690858 | A1 | 20060816 | EP 2005-100942 | 20050210 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU | | | |

PRIORITY APPLN. INFO.: EP 2005-100942 A 20050210

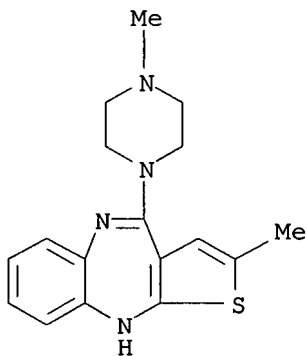
AB 1-[3-[3-(4-Chlorophenyl)propoxy]propyl]-piperidine hydrochloride (I) was prepared. Thus, Na 3-piperidinopropanolate, 3-(4-chlorophenyl)propyl mesylate, and 15-crown-5 were refluxed together in PhMe to give 75% 1-[3-[3-(4-chlorophenyl)propoxy]propyl]-piperidine. The latter in EtOAc was treated with gaseous HCl at 20-25° followed by cooling to -10° to -12° to precipitate I. The product was recrystd. from EtOAc/iPrOH to give 80% I. I showed binding affinity to human recombinant histamine H3 receptors with $K_i = 1.0$ nM.

IT 132539-06-1, Olanzapine

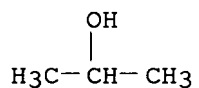
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coadministration; preparation of chlorophenylpropoxypropylpiperidine monohydrochloride as a histamine H3 receptor ligand)

RN 132539-06-1 CAPLUS

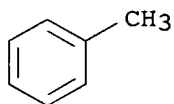
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



IT 67-63-0, Isopropanol, uses 108-88-3, Toluene, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (preparation of chlorophenylpropoxypropylpiperidine monohydrochloride as a
 histamine H3 receptor ligand)
 RN 67-63-0 CAPLUS
 CN 2-Propanol (CA INDEX NAME).



RN 108-88-3 CAPLUS
 CN Benzene, methyl- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

L12 ANSWER 13 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:795811 CAPLUS

DOCUMENT NUMBER: 145:235791

TITLE: Method and device for ophthalmic administration of active pharmaceutical ingredients

INVENTOR(S): Gross, Yossi; Herzog, Rafi; Koevary, Steven B.

PATENT ASSIGNEE(S): Pharmalight Inc., USA

SOURCE: PCT Int. Appl., 127pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2006082588 | A2 | 20060810 | WO 2006-IL145 | 20060206 |
| WO 2006082588 | A3 | 20070104 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |

PRIORITY APPLN. INFO.:

US 2005-650144P P 20050207

US 2005-742870P P 20051207

AB Disclosed is the use of a mist of a pharmaceutical composition for ophthalmic delivery of a protein or peptide active pharmaceutical ingredient, a related method of treatment and a device useful in implementing the use and method. Disclosed is also the use of a mist for ophthalmic delivery of a pharmaceutical composition including a highly irritating penetration enhancer and a carrier, a related method of treatment and a device useful in implementing the use and method. Disclosed is also a device for ophthalmic administration configured to direct a mist of a pharmaceutical composition to the eye only when the eye is open. Disclosed is also a self-sterilizing device for ophthalmic administration. Disclosed is also a device and a method for increasing the bioavailability of an ophthalmically administered drug in a pharmaceutical composition

IT 67-63-0, 2-Propanol, biological studies 67-68-5,

Dimethyl sulfoxide, biological studies 68-12-2,

N,N-Dimethylformamide, biological studies 109-99-9,

Tetrahydrofuran, biological studies 132539-06-1, Olanzapine

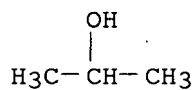
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method and device for ophthalmic administration of pharmaceutical ingredients)

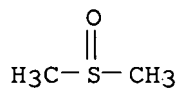
RN 67-63-0 CAPLUS

CN 2-Propanol (CA INDEX NAME)

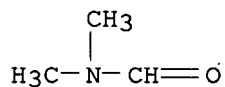
10/521,646



RN 67-68-5 CAPLUS
CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



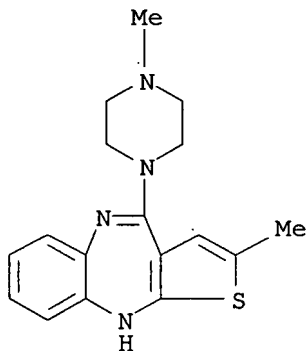
RN 68-12-2 CAPLUS
CN Formamide, N,N-dimethyl- (CA INDEX NAME)



RN 109-99-9 CAPLUS
CN Furan, tetrahydro- (CA INDEX NAME)



RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



10/521,646

112 ANSWER 14 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:548123 CAPLUS

DOCUMENT NUMBER: 145:14805

TITLE: An improved process for the preparation of polymorph form-I of olanzapine

INVENTOR(S): Giridhar, Thota; Reguri, Buchi Reddy; Chakka, Ramesh

PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Limited, India

SOURCE: Indian, 15 pp.

CODEN: INXXAP

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| IN 190857 | A1 | 20030830 | IN 2000-MA569 | 20000724 |
| PRIORITY APPLN. INFO.: | | | IN 2000-MA569 | 20000724 |

AB The present invention is related to a method for the preparation of polymorph form-I of olanzapine by conversion of the Form II into the desired polymorph by using CH₂Cl₂ as the solvent. Crude olanzapine was suspended in CH₂Cl₂ to give a clear solution and the resultant solution was then treated with carbon followed by filtration. The product obtained on drying was the polymorph form-I of olanzapine.

IT 75-09-2, Methylene chloride, uses

RL: NUU (Other use, unclassified); USES (Uses)

(improved process for preparation of polymorph form-I of olanzapine)

RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)

Cl-CH₂-Cl

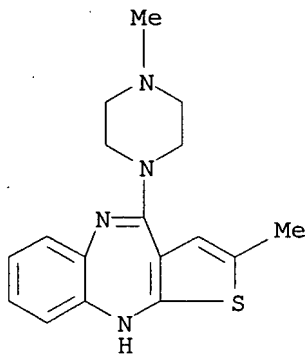
IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(improved process for preparation of polymorph form-I of olanzapine)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



112 ANSWER 15 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:434951 CAPLUS

DOCUMENT NUMBER: 146:50520

TITLE: The retention behavior of some atypical antipsychotic drugs in normal-phase TLC

AUTHOR(S): Skibinski, Robert; Misztal, Genowefa; Komsta, Lukasz; Korolczyk, Agata

CORPORATE SOURCE: Department of Medicinal Chemistry, Medical University of Lublin, Lublin, 20-090, Pol.

SOURCE: Journal of Planar Chromatography--Modern TLC (2006), 19(107), 73-80

CODEN: JPCTE5; ISSN: 0933-4173

PUBLISHER: Research Institute for Medicinal Plants

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Chromatog. behavior in normal-phase thin-layer chromatog. has been investigated for six atypical antipsychotic drugs (amisulpride, clozapine, olanzapine, quetiapine, risperidone, and ziprasidone). The drugs were separated on silica gel, alumina, NH₂, CN, diol, and polyamide plates with mixts. of n-hexane and six polar modifiers (acetone, dioxane, diethylamine, ethanol, isopropanol, and tetrahydrofuran) as mobile phases. The linearity of relationships between RM and volume fraction of modifier, the logarithm of the volume fraction, the molar fraction, and the logarithm of the molar fraction was tested. The results usually fitted the Snyder-Soczewinski equation, with $r > 0.9$. The best separation was achieved on silica gel plates with ethanol-n-hexane, 1+1 (volume/volume), containing 1.5%

aqueous

ammonia, as mobile phase.

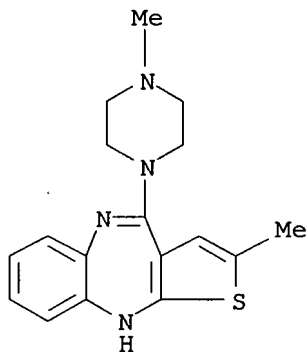
IT 132539-06-1, Olanzapine

RL: ANT (Analyte); ANST (Analytical study)

(retention behavior of some atypical antipsychotic drugs in normal-phase TLC)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



IT 67-63-0, Isopropanol, analysis 109-99-9,

Tetrahydrofuran, analysis

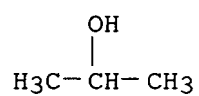
RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(retention behavior of some atypical antipsychotic drugs in normal-phase TLC)

RN 67-63-0 CAPLUS

CN 2-Propanol (CA INDEX NAME)

10/521,646



RN 109-99-9 CAPLUS
CN Furan, tetrahydro- (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

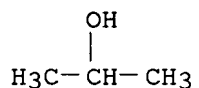
L12 ANSWER 16 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:269740 CAPLUS
 DOCUMENT NUMBER: 144:299489
 TITLE: Processes for the preparation of olanzapine
 INVENTOR(S): Pandya, Bhargav R.; Aryan, Ram Chander; Kumar, Yatendra
 PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India
 SOURCE: PCT Int. Appl., 14 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2006030300 | A2 | 20060323 | WO 2005-IB2749 | 20050916 |
| WO 2006030300 | A3 | 20060601 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: IN 2004-DE1762 A 20040917
 IN 2004-DE1765 A 20040917

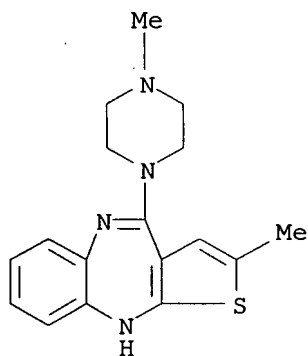
AB The invention relates to processes for the preparation of a crystalline polymorphic form of olanzapine. More particularly, it relates to the preparation of a crystalline polymorphic form of olanzapine designated as Form X and to pharmaceutical compns. that include the polymorphic Form X. The invention also relates to a process for the preparation of a methanol solvate of olanzapine and a process for using such solvate.
 IT 67-63-0, Isopropanol, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (processes for the preparation of olanzapine polymorphs)
 RN 67-63-0 CAPLUS
 CN 2-Propanol (CA INDEX NAME)



IT 132539-06-1, Olanzapine
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (processes for the preparation of olanzapine polymorphs)
 RN 132539-06-1 CAPLUS
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

10/521,646

(CA INDEX NAME)



L1/ ANSWER 17 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:234837 CAPLUS

DOCUMENT NUMBER: 144:299584

TITLE: A novel process for preparation of a pharmaceutically pure polymorphic Form I of olanzapine

INVENTOR(S): Muthukumaran, Ganesan; Veeramani, Kaliyappan; Mullaiyur, Radhakrishnan Selvaraju; Porchezhiyan, Vedapuri; Kanagasalam, Selvaraj; Nazir, Kassim Khan; Chanidran, T.

PATENT ASSIGNEE(S): Shasun Chemicals and Drugs Limited, India

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

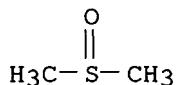
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2006027800 | A1 | 20060316 | WO 2005-IN298 | 20050905 |
| <p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW</p> <p>RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p> | | | | |
| IN 2004CH00898 | A | 20070622 | IN 2004-CH898 | 20040906 |
| PRIORITY APPLN. INFO.: | | | IN 2004-CH898 | A 20040906 |
| <p>AB The invention is directed to a novel method for making crystalline Form I of olanzapine, wherein crude olanzapine is dissolved in a water-miscible solvent in which it is freely soluble, from which substantially pure polymorphic Form I of olanzapine is recovered by precipitation For example, 35 kg of crude olanzapine was dissolved in 105 L of DMSO, maintained at 50° for 30 min, and the solution was then filtered to remove the insolubles. Addnl. 35 L of DMSO was charged into the reactor, and press the washings through filter into another reactor. The filtrate was cooled to 40°, 350 L methanol was added slowly while maintaining the temperature between 40 and 50°, followed by slow addition of 105 L of water while maintaining the temperature between 40 and 50° to precipitate olanzapine completely from the solution The reaction mass was cooled to 0 to 5°, maintained for 3 h at the same temperature, filtered and then dried at 60 to 70° in a fluidized bed drier to obtain 25 kg of final product. The product was identified as substantially pure Form I of olanzapine by powder X-ray anal.</p> | | | | |
| <p>IT 67-68-5, Dimethyl sulfoxide, processes 68-12-2, Dimethylformamide, processes 109-99-9, Tetrahydrofuran, processes</p> | | | | |
| <p>RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)</p> | | | | |
| <p>(preparation of pure polymorphic Form I of olanzapine)</p> | | | | |
| <p>RN 67-68-5 CAPLUS</p> | | | | |

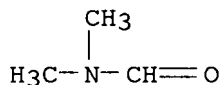
10/521,646

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 68-12-2 CAPLUS

CN Formamide, N,N-dimethyl- (CA INDEX NAME)



RN 109-99-9 CAPLUS

CN Furan, tetrahydro- (CA INDEX NAME)



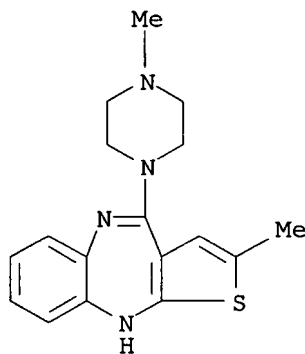
IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(preparation of pure polymorphic Form I of olanzapine)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



REFERENCE COUNT: .

10

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 18 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:149063 CAPLUS

DOCUMENT NUMBER: 144:212809

TITLE: Process for preparing olanzapine via methylation of N-demethylolanzapine in dichloromethane and/or methanol.

INVENTOR(S): Venkataraman, Sundaram; Rajan, Srinivasan Thirumalai; Bulusu, Veera Venkata Naga Chandra Sekhar; Kasturi, Ravi Kumar; Kapabalu, Suneel Kumar; Gokavalasa, Kavitha

PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Limited, India

SOURCE: U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| US 2006035887 | A1 | 20060216 | US 2005-171093 | 20050630 |
| PRIORITY APPLN. INFO.: | | | US 2004-585198P | P 20040702 |

OTHER SOURCE(S): CASREACT 144:212809

AB A process for preparing olanzapine comprises methylation of N-demethylolanzapine with a methylating agent in a solvent comprising CH₂Cl₂, MeOH, or a mixture thereof. Thus, N-demethylolanzapine (preparation given) in CH₂Cl₂ at <0° was treated with Me₂SO₄ and then with NaOH in MeOH at 0-5° to give olanzapine of 99.8% purity.

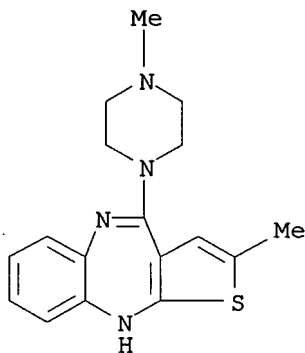
IT 132539-06-1P, Olanzapine

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(process for preparing olanzapine via methylation of N-demethylolanzapine in dichloromethane and/or methanol)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



IT 75-09-2, Dichloromethane, uses

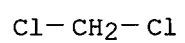
RL: NUU (Other use, unclassified); USES (Uses)

(process for preparing olanzapine via methylation of N-demethylolanzapine in dichloromethane and/or methanol)

RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)

10/521,646



10/521,646

122 ANSWER 19 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:117133 CAPLUS

DOCUMENT NUMBER: 144:198861

TITLE: Mixed solvate of olanzapine, method for preparing it and method for preparing form I of olanzapine therefrom

INVENTOR(S): Dalmases Barjoan, Pere; Bessa Bellmunt, Jordi

PATENT ASSIGNEE(S): Laboratorios Lesvi, S.L., Spain

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2006013435 | A1 | 20060209 | WO 2005-IB2209 | 20050707 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| ES 2253091 | A1 | 20060516 | ES 2004-1850 | 20040727 |
| EP 1773841 | A1 | 20070418 | EP 2005-759149 | 20050707 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | |

PRIORITY APPLN. INFO.:

ES 2004-1850 A 20040727

WO 2005-IB2209 W 20050707

AB Said mixed solvate is a solvate of olanzapine/water/tetrahydrofuran in the proportion 1:1:1/2 (I). The method for preparing said solvate comprises treating a crude anhydrous olanzapine with a mixture of tetrahydrofuran/water. The method for preparing Form I of olanzapine includes desolvating the mixed solvate of formula I, by means of drying, in vacuo and under temperature-controlled conditions.

IT 109-99-9, Tetrahydrofuran, reactions 132539-06-1, Olanzapine

RL: RCT (Reactant); RACT (Reactant or reagent)

(mixed solvate of olanzapine and method for preparing form I of olanzapine therefrom)

RN 109-99-9 CAPLUS

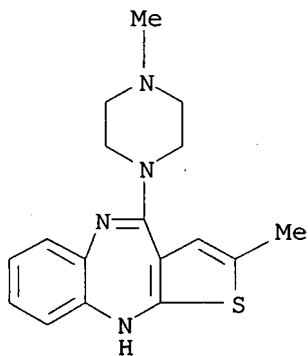
CN Furan, tetrahydro- (CA INDEX NAME)



RN 132539-06-1 CAPLUS

10/521,646

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



REFERENCE COUNT:

6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

LNZ ANSWER 20 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:100738 CAPLUS

DOCUMENT NUMBER: 144:198849

TITLE: Novel dosage form comprising modified-release and immediate-release active ingredients

INVENTOR(S): Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar

PATENT ASSIGNEE(S): India

SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

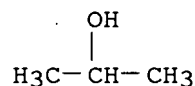
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 2006024365 | A1 | 20060202 | US 2005-134633 | 20050519 |
| IN 2002MU00697 | A | 20040529 | IN 2002-MU697 | 20020805 |
| IN 193042 | A1 | 20040626 | | |
| IN 2002MU00699 | A | 20040529 | IN 2002-MU699 | 20020805 |
| IN 2003MU00080 | A | 20050204 | IN 2003-MU80 | 20030122 |
| IN 2003MU00082 | A | 20050204 | IN 2003-MU82 | 20030122 |
| US 2004096499 | A1 | 20040520 | US 2003-630446 | 20030729 |
| PRIORITY APPLN. INFO.: | | | IN 2002-MU697 | A 20020805 |
| | | | IN 2002-MU699 | A 20020805 |
| | | | IN 2003-MU80 | A 20030122 |
| | | | IN 2003-MU82 | A 20030122 |
| | | | US 2003-630446 | A2 20030729 |

AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form. Tablets containing 10 mg sodium pravastatin and 1000 mg niacin were prepared The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

IT 67-63-0, Isopropyl alcohol, biological studies 67-68-5, Dimethyl sulfoxide, biological studies 132539-06-1, Olanzapine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel dosage form comprising modified-release and immediate-release active ingredients)

RN 67-63-0 CAPLUS

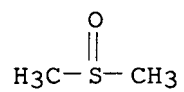
CN 2-Propanol (CA INDEX NAME)



RN 67-68-5 CAPLUS

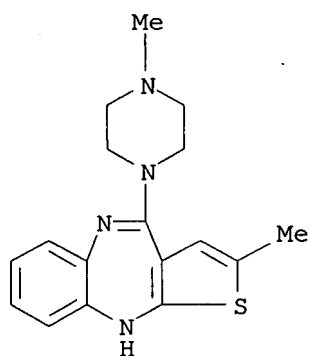
CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)

10/521,646



RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



10/521,646

112 ✓ ANSWER 21 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:54122 CAPLUS

DOCUMENT NUMBER: 144:150401

TITLE: A process for the preparation of olanzapine

INVENTOR(S): Shastri, Jwalant Ashesh; Bhatnagar, Akshat; Thaper, Rajesh Kumar; Dubey, Sushil Kumar

PATENT ASSIGNEE(S): Jubilant Organosys Limited, India

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

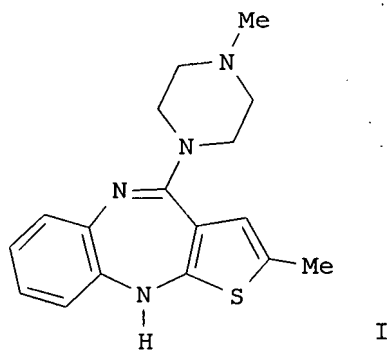
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2006006180 | A1 | 20060119 | WO 2004-IN207 | 20040714 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| CA 2576862 | A1 | 20060119 | CA 2004-2576862 | 20040714 |
| EP 1778649 | A1 | 20070502 | EP 2004-745138 | 20040714 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | |
| PRIORITY APPLN. INFO.: | | | WO 2004-IN207 | W 20040714 |
| OTHER SOURCE(S): | CASREACT 144:150401 | | | |
| GI | | | | |



AB A process for the preparation of title compound I was disclosed. For example,
a solution of 2-(2-aminoanilino)-5-methylthiophene-3-carbonitrile (10.0 g),
N-methylpiperazine (60 mL) and N-methylpiperazine hydrochloride (24 gm)

was heated at 120 °C until the reaction was completed to afford after work olanzapine. Of note, 2-polymorphic forms of olanzapine were isolated.

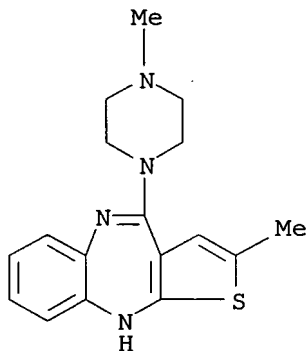
IT 132539-06-1P, Olanzapine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(polymorphic forms I, II; preparation of olanzapine)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)

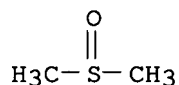


IT 67-68-5, Dimethyl sulfoxide, uses 68-12-2, Dimethylformamide, uses 75-05-8, Acetonitrile, uses 75-09-2, Dichloromethane, uses 108-88-3, Toluene, uses 109-99-9, Tetrahydrofuran, uses

RL: NUU (Other use, unclassified); USES (Uses) (preparation of olanzapine)

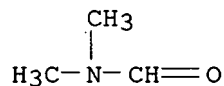
RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



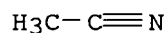
RN 68-12-2 CAPLUS

CN Formamide, N,N-dimethyl- (CA INDEX NAME)



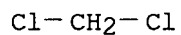
RN 75-05-8 CAPLUS

CN Acetonitrile (CA INDEX NAME)

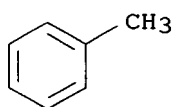


10/521,646

RN 75-09-2 CAPLUS
CN Methane, dichloro- (CA INDEX NAME)



RN 108-88-3 CAPLUS
CN Benzene, methyl- (CA INDEX NAME)



RN 109-99-9 CAPLUS
CN Furan, tetrahydro- (CA INDEX NAME)



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

LA2 ANSWER 22 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1311702 CAPLUS

DOCUMENT NUMBER: 144:57525

TITLE: Coated vaginal devices for vaginal delivery of therapeutically effective and/or health-promoting agents

INVENTOR(S): Wilson, Michelle; Desai, Kishorkumar J.; Pauletti, Giovanni M.; Antoon, Mitchell K.; Clendening, Chris E.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 40 pp., Cont.-in-part of U.S. Ser. No. 126,863

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 2005276836 | A1 | 20051215 | US 2005-180076 | 20050712 |
| US 6197327 | B1 | 20010306 | US 1998-79897 | 19980515 |
| US 6086909 | A | 20000711 | US 1999-249963 | 19990212 |
| US 6572874 | B1 | 20030603 | US 2000-626025 | 20000727 |
| NZ 508130 | A | 20020301 | NZ 2000-508130 | 20001113 |
| AU 765269 | B2 | 20030911 | AU 2001-54192 | 20010703 |
| US 2003049302 | A1 | 20030313 | US 2002-226667 | 20020821 |
| US 6982091 | B2 | 20060103 | | |
| US 2004005345 | A1 | 20040108 | US 2003-349029 | 20030122 |
| US 6905701 | B2 | 20050614 | | |
| US 2004043071 | A1 | 20040304 | US 2003-600849 | 20030620 |
| US 2005249774 | A1 | 20051110 | US 2005-126863 | 20050510 |
| PRIORITY APPLN. INFO.: | | | US 1997-49325P | P 19970611 |
| | | | US 1998-79897 | A2 19980515 |
| | | | US 1999-249963 | A2 19990212 |
| | | | US 2000-626025 | A2 20000727 |
| | | | US 2002-226667 | A2 20020821 |
| | | | US 2003-349029 | A2 20030122 |
| | | | US 2003-600849 | A2 20030620 |
| | | | US 2004-587454P | P 20040712 |
| | | | US 2005-126863 | A2 20050510 |
| | | | AU 1998-76976 | A3 19980610 |
| | | | NZ 1998-502120 | A1 19980610 |
| | | | US 1999-146218P | P 19990728 |
| | | | US 2001-315877P | P 20010829 |
| | | | US 2002-390748P | P 20020621 |

AB Disclosed is a vaginal device for delivering therapeutical and/or health-promoting agents. The vaginal device partly or completely coated by, covered by or combined with a coating or covering comprising a film, foam, strip, cap, cup or particles. The coating of the device comprises a mucoadhesive composition comprising a therapeutical and/or health-promoting agent. For example, sumatriptan vaginal suppository were prepared from Suppocire AS2X, hydroxypropyl Me cellulose as a mucoadhesive agent, and Transcutol as a permeation enhancer.

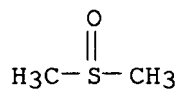
IT 67-68-5, Dimethyl sulfoxide, biological studies
132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coated vaginal devices for vaginal delivery of therapeutically effective and/or health-promoting agents)

10/521,646

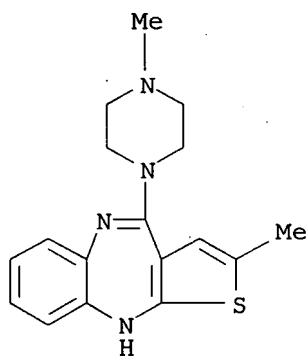
RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



10/521,646

112 ANSWER 23 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1220824 CAPLUS

DOCUMENT NUMBER: 143:466081

TITLE: Process for the preparation of olanzapine form-I

INVENTOR(S): Chava, Satyanarayana; Gorantla, Seeta Ramanjaneyulu; Abbineni, Jyothi Basu

PATENT ASSIGNEE(S): Matrix Laboratories Ltd., India

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2005107375 | A2 | 20051117 | WO 2005-IN98 | 20050404 |
| WO 2005107375 | A3 | 20060406 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

IN 2004CH00416 A 20060519 IN 2004-CH416 20040506

PRIORITY APPLN. INFO.: IN 2004-CH416 A 20040506

AB The present invention provides a reproducible, novel, com. feasible process to obtain olanzapine Form-I of substantial polymorphic purity with minimal number of steps using minimal number of solvents by condensation of 4-Aminomethyl-10H-thieno[2,3-b][1,5] benzodiazepine hydrochloride with N-Me piperazine followed by isolation of olanzapine methylene chloride solvate and conversion of the same to Olanzapine Form-I.

IT 67-63-0, Isopropanol, uses 67-68-5, DMSO, uses

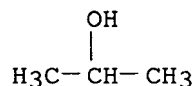
108-88-3, Toluene, uses

RL: NUU (Other use, unclassified); USES (Uses)

(preparation of olanzapine polymorphism through olanzapine methylene chloride solvate)

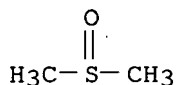
RN 67-63-0 CAPLUS

CN 2-Propanol (CA INDEX NAME)

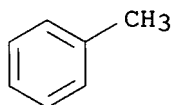


RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)

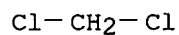


RN 108-88-3 CAPLUS
CN Benzene, methyl- (CA INDEX NAME)



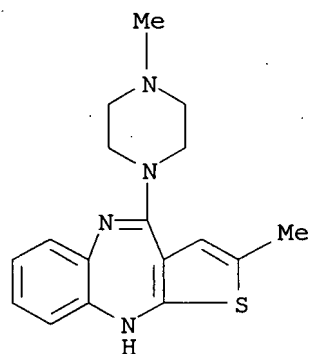
IT 75-09-2, Methylene chloride, reactions
RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(preparation of olanzapine polymorphism through olanzapine methylene chloride solvate)

RN 75-09-2 CAPLUS
CN Methane, dichloro- (CA INDEX NAME)



IT 132539-06-1P, Olanzapine
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(preparation of olanzapine polymorphism through olanzapine methylene chloride solvate)

RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



10/521,646

112 ANSWER 24 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1132789 CAPLUS

DOCUMENT NUMBER: 143:379779

TITLE: Marker detection method and apparatus to monitor drug compliance

INVENTOR(S): Melker, Richard J.; Dennis, Donn Michael; Prokai, Laszlo

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 722,620.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2005233459 | A1 | 20051020 | US 2005-97647 | 20050401 |
| US 2004081587 | A1 | 20040429 | US 2003-722620 | 20031126 |
| US 2005054942 | A1 | 20050310 | US 2004-788501 | 20040226 |
| EP 1718971 | A2 | 20061108 | EP 2005-756623 | 20050228 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU

PRIORITY APPLN. INFO.:

| | | |
|-----------------|----|----------|
| US 2003-722620 | A2 | 20031126 |
| US 1999-164250P | P | 19991108 |
| US 2000-708789 | B1 | 20001108 |
| US 2002-54619 | A2 | 20020122 |
| US 2002-178877 | A2 | 20020624 |
| US 2004-788501 | A | 20040226 |
| WO 2005-US6355 | W | 20050228 |

AB The invention includes systems and methods for monitoring therapeutic drug concentration in blood by detecting markers, such as odors, upon exhalation by a

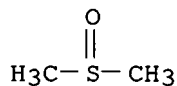
patient after the drug is taken, wherein such markers result either directly from the drug itself or from an additive combined with the drug. In the case of olfactory markers, the invention preferably utilizes electronic sensor technol., such as the com. devices referred to as "artificial" or "electronic" noses or tongues, to noninvasively monitor drug levels in blood. The invention further includes a reporting system capable of tracking drug concns. in blood (remote or proximate locations) and providing the necessary alerts with regarding to ineffective or toxic drug dosages in a patient.

IT 67-68-5, Dimethyl sulfoxide, biological studies

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(marker detection method and apparatus to monitor drug compliance)

RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



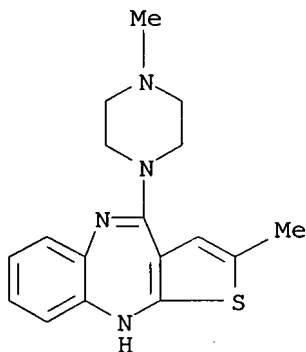
IT 132539-06-1, Zyprexa

10/521,646

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(marker detection method and apparatus to monitor drug compliance)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



10/521,646

L12 ANSWER 25 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1042253 CAPLUS

DOCUMENT NUMBER: 143:332562

TITLE: Synthesis of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine) and salts

INVENTOR(S): Mesar, Tomaz; Copar, Anton; Sturm, Hubert; Ludescher, Johannes

PATENT ASSIGNEE(S): Lek Pharmaceuticals D.D., Slovenia

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2005090359 | A2 | 20050929 | WO 2005-EP2876 | 20050317 |
| WO 2005090359 | A3 | 20070426 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA | | | |
| SI 21747 | A | 20051031 | SI 2004-79 | 20040318 |
| AU 2005223338 | A1 | 20050929 | AU 2005-223338 | 20050317 |
| CA 2558654 | A1 | 20050929 | CA 2005-2558654 | 20050317 |
| EP 1749010 | A2 | 20070207 | EP 2005-716177 | 20050317 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU | | | |
| BR 2005007584 | A | 20070703 | BR 2005-7584 | 20050317 |
| IN 2006CN03389 | A | 20070615 | IN 2006-CN3389 | 20060918 |
| PRIORITY APPLN. INFO.: | | | SI 2004-79 | A 20040318 |
| | | | SI 2004-311 | A 20041116 |
| | | | WO 2005-EP2876 | W 20050317 |

OTHER SOURCE(S): MARPAT 143:332562

AB The invention relates to a new process for the preparation of salts of olanzapine and transformation thereof into a pharmaceutically acceptable pure and discolored final product. The present invention also relates to new processes for the preparation of pure olanzapine. Thus, olanzapine was converted to its fumarate salt by reaction with fumaric acid in iso-PrOH.

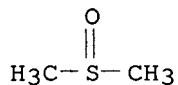
IT 67-68-5, uses 68-12-2, Dimethylformamide, uses 75-05-8, Acetonitrile, uses 108-88-3, uses 109-99-9, uses

RL: NUU (Other use, unclassified); USES (Uses) (preparation of olanzapine and salts)

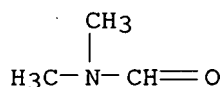
RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)

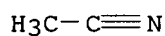
10/521,646



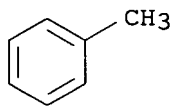
RN 68-12-2 CAPLUS
CN Formamide, N,N-dimethyl- (CA INDEX NAME)



RN 75-05-8 CAPLUS
CN Acetonitrile (CA INDEX NAME)



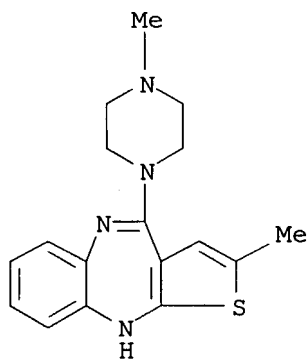
RN 108-88-3 CAPLUS
CN Benzene, methyl- (CA INDEX NAME)



RN 109-99-9 CAPLUS
CN Furan, tetrahydro- (CA INDEX NAME)



IT 132539-06-1P, Olanzapine
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)
(preparation of olanzapine and salts)
RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



112 ANSWER 26 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1004752 CAPLUS

DOCUMENT NUMBER: 143:311947

TITLE: Isopropanol water solvate of olanzapine

INVENTOR(S): Kotar-Jordan, Berta; Lenarsic, Roman; Grcman, Marija; Smrkolj, Matej; Meden, Anton; Simoncic, Igor; Zupet, Rok; Gnidovec, Joze; Benkic, Primoz

PATENT ASSIGNEE(S): Krka, Tovarna Zdravil D.D. Novo Mesto, Slovenia

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

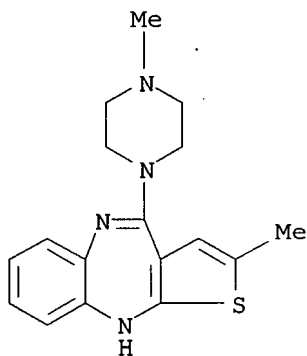
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|-----------------------|------------|
| WO 2005085256 | A1 | 20050915 | WO 2005-EP2389 | 20050307 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| SI 21746 | A | 20051031 | SI 2004-73 | 20040308 |
| DE 102004060412 | A1 | 20060706 | DE 2004-102004060412 | 20041214 |
| CA 2557986 | A1 | 20050915 | CA 2005-2557986 | 20050307 |
| EP 1730153 | A1 | 20061213 | EP 2005-707723 | 20050307 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU | | | | |
| NO 2006004484 | A | 20061129 | NO 2006-4484 | 20061003 |
| IN 2006CN03716 | A | 20070615 | IN 2006-CN3716 | 20061009 |
| PRIORITY APPLN. INFO.: | | | SI 2004-73 | A 20040308 |
| | | | DE 2004-102004060412A | 20041214 |
| | | | WO 2005-EP2389 | W 20050307 |
| AB | The invention relates to a novel and well defined solvate form of olanzapine which contains 2 mols. of water and 1 mol. of isopropanol per 2 mols. of olanzapine, and which can be converted into other, forms of olanzapine, in particular form I of olanzapine, as well as processes for preparing form I olanzapine. | | | |
| IT | 132539-06-1, Olanzapine | | | |
| | RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) | | | |
| | (polymorphism; prepn of isopropanol water solvates of olanzapine) | | | |
| RN | 132539-06-1 CAPLUS | | | |
| CN | 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME) | | | |



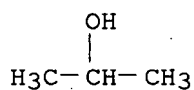
IT 67-63-0, Isopropanol, uses 67-68-5, Dimethylsulfoxide,
uses 75-09-2, Dichloromethane, uses 108-88-3, Toluene,
uses

RL: NUU (Other use, unclassified); USES (Uses)

(prepn of isopropanol water solvates of olanzapine)

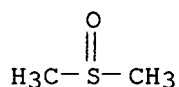
RN 67-63-0 CAPLUS

CN 2-Propanol (CA INDEX NAME)



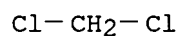
RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



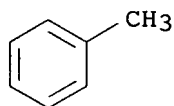
RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)



RN 108-88-3 CAPLUS

CN Benzene, methyl- (CA INDEX NAME)

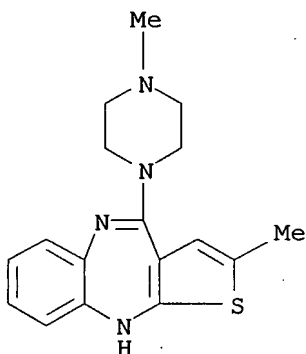


IT 132539-06-1DP, Olanzapine, methylene chloride hemisolvate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

10/521,646

(prepn of isopropanol water solvates of olanzapine)
RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn of isopropanol water solvates of olanzapine)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

12 ANSWER 27 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

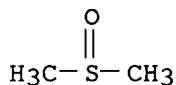
ACCESSION NUMBER: 2005:962265 CAPLUS
 DOCUMENT NUMBER: 143:235359
 TITLE: Process for the preparation of olanzapine form 1
 useful as antipsychotic drug
 INVENTOR(S): Rammohan Rao, Davuluri; Dwivedi, Shriprakash Dhar;
 Sreenivasulu, Pamujula; Sasi Kiran, Surapaneni
 PATENT ASSIGNEE(S): Neuland Laboratories Limited, India
 SOURCE: PCT Int. Appl., 27 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2005080401 | A1 | 20050901 | WO 2004-IN210 | 20040716 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| IN 2004CH00128 | A | 20060203 | IN 2004-CH128 | 20040219 |
| EP 1716154 | A1 | 20061102 | EP 2004-770670 | 20040716 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | |
| US 2007072845 | A1 | 20070329 | US 2005-557650 | 20051118 |
| PRIORITY APPLN. INFO.: | | | IN 2004-CH128 | A 20040219 |
| | | | WO 2004-IN210 | W 20040716 |

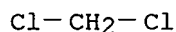
AB This invention provides an improved process for the preparation of Olanzapine Form (I). More specially, the invention provides in-situ improved process for the direct preparation of crystalline form of Olanzapine Form (I). The present invention also provides highly pure Olanzapine Form I with single individual impurity less than 0.1 % by HPLC. The process comprises: (1) refluxing a mixture of 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride, N-methylpiperazine, DMSO, and toluene at 110-130°, (2) cooling the reaction mixture to 20-90°, (3) adding water to the cooled mixture, (4) cooling the resulting mixture to (-10)-30°, (5) filtering the mixture, (6) slurring the resulting wet cake with water at 50-90°, (7) filtering the material and sucking dry, (8) repeating the steps 6 to 7 till the traces of DMSO and its odor are removed, (9) dissolving the resulting wet cake in a chlorinated solvent at 25-30°, (10) separating the aqueous layer, (11) stirring the organic layer with anhydrous Na2SO4 or anhydrous MgSO4, (12) filtering and washing with CH2Cl2, (13) repeating the steps (11) and (12) till the moisture content is ≤ 0.1 %, and (14) purging dry ammonia gas in CH2Cl2 layer to get polymorphic form of Olanzapine form I. The process continues as follows; (15) removing the MgSO4 from the reaction mixture and washing the salts with CH2Cl2, (16) refluxing the CH2Cl2 layer, (17) concentrating the reaction mixture

under vacuum, (18) cooling the reaction mixture to a temperature, (19) stirring the material at 0-5°, (20) filtering the material and washing with chilled CH₂Cl₂, (21) air drying the material, and (22) vacuum drying the product at 60-70°.

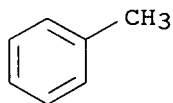
IT 67-68-5, DMSO, uses 75-09-2, Methylene chloride, uses
108-88-3, Toluene, uses
RL: NUU (Other use, unclassified); USES (Uses)
(preparation of olanzapine form 1 useful as antipsychotic drug)
RN 67-68-5 CAPLUS
CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



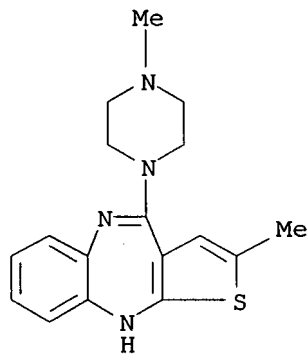
RN 75-09-2 CAPLUS
CN Methane, dichloro- (CA INDEX NAME)



RN 108-88-3 CAPLUS
CN Benzene, methyl- (CA INDEX NAME)



IT 132539-06-1P, Olanzapine
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of olanzapine form 1 useful as antipsychotic drug)
RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

10/521,646

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

✓
L12 ANSWER 28 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:638703 CAPLUS
DOCUMENT NUMBER: 143:139194
TITLE: Buccal dosage forms for extended drug release
INVENTOR(S): Jain, Rajesh; Jindal, Kour Chand; Singh, Sukhjeet
PATENT ASSIGNEE(S): Panacea Biotech Ltd., India
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2005065640 | A1 | 20050721 | WO 2005-IN3 | 20050105 |
| WO 2005065640 | A8 | 20051208 | | |

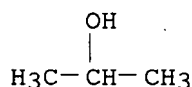
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|------------------------|---|----------|--------------|------------|
| IN 2004DE00024 | A | 20060210 | IN 2004-DE24 | 20040106 |
| PRIORITY APPLN. INFO.: | | | IN 2004-DE24 | A 20040106 |
| | | | IN 2004-DE26 | A 20040106 |

AB Buccal dosage form compns., preferably of poorly bioavailable drug(s), or drug(s) which undergo extensive presystematic metabolism, are provided. The compns. provide extended release of the drug in the oral cavity, and are preferably in the taste masked form. A process of preparing of such compns. is also provided. Thus, a tablet contained sumatriptan succinate 25.0, Indion-204 75.0, maltodextrin 48.0, sucrose 30.0, CM-cellulose 18.0, HPMC 8.0, HPC 8.0, citric acid 15.0, NaCl 5.0, and Povidone 3.0 25 mg/tablet.

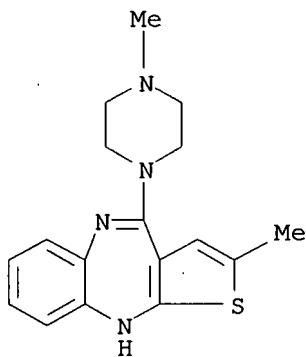
IT 67-63-0, Isopropanol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(buccal dosage forms for extended drug release)

RN 67-63-0 CAPLUS
CN 2-Propanol (CA INDEX NAME)



IT 132539-06-1, Olanzapine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(buccal dosage forms for extended drug release)

RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

12 ANSWER 29 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:612306 CAPLUS
 DOCUMENT NUMBER: 143:115577
 TITLE: Condensation method for preparing olanzapine from
 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine
 and N-methylpiperazine
 INVENTOR(S): Dolitzky, Benzion; Diller, Dov
 PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva
 Pharmaceuticals USA, Inc.
 SOURCE: PCT Int. Appl., 16 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|------------|
| WO 2005063771 | A1 | 20050714 | WO 2004-US43159 | 20041222 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2551806 | A1 | 20050714 | CA 2004-2551806 | 20041222 |
| US 2005159408 | A1 | 20050721 | US 2004-20869 | 20041222 |
| EP 1611139 | A1 | 20060104 | EP 2004-815261 | 20041222 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU | | | |
| CN 1906201 | A | 20070131 | CN 2004-80040481 | 20041222 |
| JP 2007515428 | T | 20070614 | JP 2006-545605 | 20041222 |
| PRIORITY APPLN. INFO.: | | | US 2003-532126P | P 20031222 |
| | | | US 2004-547901P | P 20040225 |
| | | | US 2004-561871P | A 20040412 |
| | | | WO 2004-US43159 | W 20041222 |

OTHER SOURCE(S): CASREACT 143:115577

AB A method of synthesizing olanzapine comprises: (1) heating a reaction mixture of N-methylpiperazine and 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine (i.e., thienobenzodiazepine) to about 110-145°; (2) maintaining the reaction mixture at about 110-145° for ≥5 h; (3) cooling the reaction mixture; (4) adding water, at least two organic solvents, or water and at least one organic solvent until olanzapine ppts.; (5) and collecting the olanzapine.

IT 132539-06-1P, Olanzapine

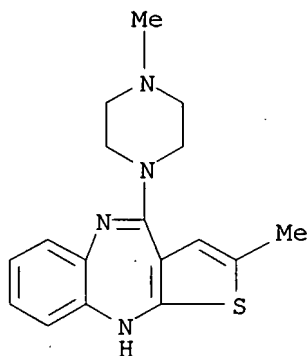
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(condensation method for preparing olanzapine from 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine and N-methylpiperazine)

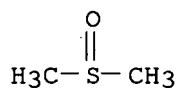
RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

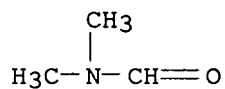
(CA INDEX NAME)



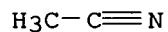
IT 67-68-5, DmsO, uses 68-12-2, Dmf, uses 75-05-8
 , Acetonitrile, uses 108-88-3, Toluene, uses 109-99-9,
 Thf, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (solvent; condensation method for preparing olanzapine from
 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine and
 N-methylpiperazine)
 RN 67-68-5 CAPLUS
 CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



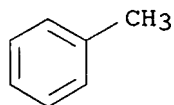
RN 68-12-2 CAPLUS
 CN Formamide, N,N-dimethyl- (CA INDEX NAME)



RN 75-05-8 CAPLUS
 CN Acetonitrile (CA INDEX NAME)



RN 108-88-3 CAPLUS
 CN Benzene, methyl- (CA INDEX NAME)



10/521,646

RN 109-99-9 CAPLUS
CN Furan, tetrahydro- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

112 ANSWER 30 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:472001 CAPLUS

DOCUMENT NUMBER: 143:13358

TITLE: Olanzapine containing transdermal drug delivery compositions

INVENTOR(S): Gordon, Ryan D.

PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2005049090 | A2 | 20050602 | WO 2004-US36439 | 20041102 |
| WO 2005049090 | A3 | 20050929 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2004291043 | A1 | 20050602 | AU 2004-291043 | 20041102 |
| CA 2546200 | A1 | 20050602 | CA 2004-2546200 | 20041102 |
| EP 1684734 | A2 | 20060802 | EP 2004-819044 | 20041102 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS | | | |
| JP 2007511605 | T | 20070510 | JP 2006-541215 | 20041102 |
| US 2007148218 | A1 | 20070628 | US 2006-579604 | 20060517 |
| PRIORITY APPLN. INFO.: | | | US 2003-523186P | P 20031118 |
| | | | WO 2004-US36439 | W 20041102 |

AB The invention features compns. for the transdermal administration of olanzapine. The compns. include olanzapine or a pharmaceutically acceptable salt thereof, a pressure sensitive adhesive, and an excipient, such as a permeation enhancer and/or a solubilizer of olanzapine. The compns. are useful for the treatment of certain psychiatric disorders, for example schizophrenia and bipolar mania.

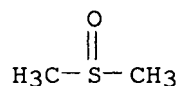
IT 67-68-5, Dimethylsulfoxide, biological studies

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(olanzapine containing transdermal drug delivery compns.)

RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



IT 132539-06-1, Olanzapine

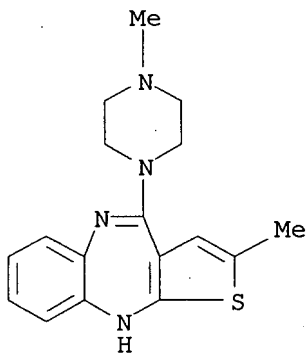
10/521,646

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(olanzapine containing transdermal drug delivery compns.)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



112 ANSWER 31 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:71078 CAPLUS

DOCUMENT NUMBER: 142:183422

TITLE: Prevention of molecular weight reduction of the polymer, impurity formation and gelling in polymer compositions

INVENTOR(S): Thanoo, B. C.; Murtagh, Jim; Johns, Gonto

PATENT ASSIGNEE(S): Oakwood Laboratories, L.L.C., USA

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2005007122 | A2 | 20050127 | WO 2004-US23324 | 20040719 |
| WO 2005007122 | A3 | 20050909 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2533314 | A1 | 20050127 | CA 2004-2533314 | 20040719 |
| US 2005042294 | A1 | 20050224 | US 2004-894956 | 20040719 |
| EP 1660039 | A2 | 20060531 | EP 2004-778698 | 20040719 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| PRIORITY APPLN. INFO.: | | | US 2003-488573P | P 20030718 |
| | | | WO 2004-US23324 | W 20040719 |

AB Polymer and drug containing compns. and method of preparing such compns. are disclosed. The dispersed phase formulation has a polymer, a pharmaceutically or biol. active agent and a small fraction of low pKa acid additive. Stable, filter sterilizable, non-gelling solns. containing e.g. GnRH analogs at least at levels typically used in sustained release formulations and a method of increasing solubility of a high level of a GnRH analog or a freeze-dried antagonist of GnRH in a polymer containing solution are

also disclosed. The amount of the acid additive in the polymer solution is such that it is sufficient to increase the solubility of the high level of the GnRH analog in the polymer solution without affecting the release characteristics of the microspheres prepared therefrom. For example, control of mol. weight (MW) reduction of PLGA in dispersed phase with or without

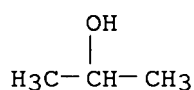
leuprolide was studied. There was reduction in MW upon incubating the dispersed phase consisting of RG503H, dichloromethane (DCM), and MeOH. The presence of lactic acid, glycolic acid, and oligomer acids reduced the reduction in MW. Under the exptl. conditions, acids with very low pKa, such as lactic (pKa 3.08) and glycolic (pKa 3.83) acids were more effective in preventing MW reduction caused by methanol. Even with a fraction of the acid (less than or equal to 1 mol% to that of the nucleophilic compound,

methanol) in the dispersed phase, there was influence on the mol. weight reduction. There was a considerable reduction in the mol. weight of the polymer in the dispersed phase containing leuprolide. Again, presence of lactic acid, glycolic acid, and oligomer acids reduced the extent of mol. weight reduction, much more efficiently compared to acetic acid.

IT 67-63-0, Isopropanol, uses 67-68-5; Dimethylsulfoxide, uses 68-12-2, Dimethylformamide, uses 75-09-2, Dichloromethane, uses 109-99-9, Tetrahydrofuran, uses RL: NUU (Other use, unclassified); USES (Uses) (sustained-release comps. comprising polymer matrix and acid additive for preventing polymer mol. weight reduction, impurity formation and gelling in presence of nucleophile)

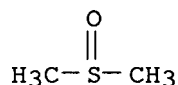
RN 67-63-0 CAPLUS

CN 2-Propanol (CA INDEX NAME)



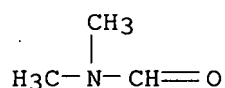
RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 68-12-2 CAPLUS

CN Formamide, N,N-dimethyl- (CA INDEX NAME)



RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)



RN 109-99-9 CAPLUS

CN Furan, tetrahydro- (CA INDEX NAME)



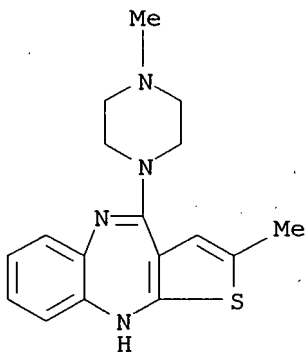
IT 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sustained-release compns. comprising polymer matrix and acid additive for preventing polymer mol. weight reduction, impurity formation and gelling in presence of nucleophile)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



10/521,646

112 ANSWER 32 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:14214 CAPLUS

DOCUMENT NUMBER: 142:114054

TITLE: Preparation of pyrazolo[3,4-b]pyridin-6-ones as GSK-3 kinase inhibitors

INVENTOR(S): Wager, Travis T.

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

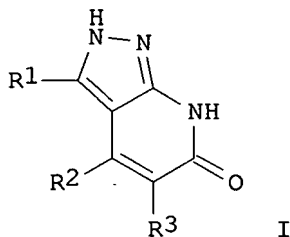
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|--|------------|
| WO 2005000303 | A1 | 20050106 | WO 2004-IB1989 | 20040614 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2529083 | A1 | 20050106 | CA 2004-2529083 | 20040614 |
| EP 1641454 | A1 | 20060405 | EP 2004-736777 | 20040614 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | |
| BR 2004011891 | A | 20060829 | BR 2004-11891 | 20040614 |
| JP 2007516169 | T | 20070621 | JP 2006-516555 | 20040614 |
| US 2005026946 | A1 | 20050203 | US 2004-874962 | 20040623 |
| MX 2005PA14201 | A | 20060224 | MX 2005-PA14201 | 20051221 |
| PRIORITY APPLN. INFO.: | | | US 2003-483489P | P 20030627 |
| | | | WO 2004-IB1989 | W 20040614 |
| OTHER SOURCE(S): | | | CASREACT 142:114054; MARPAT 142:114054 | |
| GI | | | | |



AB Title compds. I [R1-2 = H, alkyl, alkoxy, cycloalkyl, etc.; R3 = H, alkyl, alkoxy, cycloalkyl] are prepared For instance, 3,4-diphenyl-2,7-dihydropyrazolo[3,4-b]pyridin-6-one is prepared in 4 steps from

3-oxo-3-phenylpropionitrile (preparation given), tert-butylhydrazine and Et benzoylacetate. Compds. I exhibit inhibitory activity, expressed as IC₅₀, against GSK-3 that are <10,000 nM. I are useful for treatment of diabetes, dementia, Alzheimer's Disease, stroke, schizophrenia, depression, hair loss, and cancer.

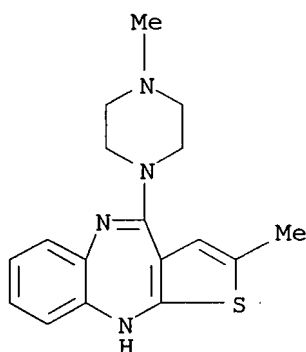
IT 132539-06-1, Olanzapine

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination pharmaceutical; preparation of pyrazolo[3,4-b]pyridin-6-ones as GSK-3 kinase inhibitors for disease treatment)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



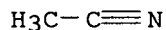
IT 75-05-8, Acetonitrile, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of pyrazolo[3,4-b]pyridin-6-ones as GSK-3 kinase inhibitors for disease treatment)

RN 75-05-8 CAPLUS

CN Acetonitrile (CA INDEX NAME)



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

L12 ANSWER 33 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:927215 CAPLUS

DOCUMENT NUMBER: 141:384322

TITLE: Preparation of polymorphic crystalline forms of the antipsychotic agent olanzapine dihydrochloride

INVENTOR(S): Petho, Janos; Barkoczy, Jozsef; Kotay Nagy, Peter; Simig, Gyula; Szent-Kirallyi, Zsuzsa

PATENT ASSIGNEE(S): Egis Gyogyszergyar Rt., Hung.

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

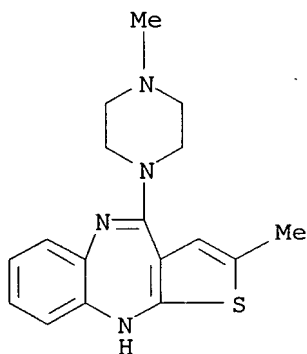
DOCUMENT TYPE: Patent

LANGUAGE: English

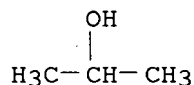
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

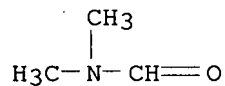
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|------------|
| WO 2004094433 | A1 | 20041104 | WO 2004-HU42 | 20040422 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| HU 200301082 | A2 | 20041228 | HU 2003-1082 | 20030422 |
| AU 2004232544 | A1 | 20041104 | AU 2004-232544 | 20040422 |
| CA 2522734 | A1 | 20041104 | CA 2004-2522734 | 20040422 |
| EP 1620439 | A1 | 20060201 | EP 2004-728854 | 20040422 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | |
| CN 1777613 | A | 20060524 | CN 2004-80010665 | 20040422 |
| JP 2006524219 | T | 20061026 | JP 2006-506249 | 20040422 |
| BG 109361 | A | 20060929 | BG 2005-109361 | 20051122 |
| US 2007004706 | A1 | 20070104 | US 2006-553908 | 20060911 |
| PRIORITY APPLN. INFO.: | | | HU 2003-1082 | A 20030422 |
| | | | WO 2004-HU42 | W 20040422 |
| AB | Polymorphic crystalline forms of the antipsychotic agent olanzapine dihydrochloride are presented. | | | |
| IT | 132539-06-1, Olanzapine | | | |
| RL: | RCT (Reactant); RACT (Reactant or reagent) | | | |
| | (preparation of polymorphic crystalline forms of the antipsychotic agent olanzapine dihydrochloride) | | | |
| RN | 132539-06-1 CAPLUS | | | |
| CN | 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME) | | | |



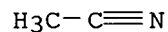
IT 67-63-0, 2-Propanol, uses 68-12-2, Dmf, uses
 75-05-8, Acetonitrile, uses 109-99-9, Thf, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (solvent; in preparation of polymorphic crystalline forms of the
 antipsychotic
 agent olanzapine dihydrochloride)
 RN 67-63-0 CAPLUS
 CN 2-Propanol (CA INDEX NAME)



RN 68-12-2 CAPLUS
 CN Formamide, N,N-dimethyl- (CA INDEX NAME)



RN 75-05-8 CAPLUS
 CN Acetonitrile (CA INDEX NAME)



RN 109-99-9 CAPLUS
 CN Furan, tetrahydro- (CA INDEX NAME)



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 34 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:872664 CAPLUS

DOCUMENT NUMBER: 141:355325

TITLE: Novel forms of salts, co-crystals, and solvates of olanzapine and uses in treatment of psychosis and functional bowel disorders

INVENTOR(S): Hickey, Magali Bourghol; Remenar, Julius

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|------------------|----------|
| WO 2004089313 | A2 | 20041021 | WO 2004-US9947 | 20040331 |
| WO 2004089313 | A3 | 20051124 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| WO 2004078161 | A1 | 20040916 | WO 2003-US327772 | 20030904 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2007026078 | A1 | 20070201 | US 2003-660202 | 20030911 |
| WO 2004060347 | A2 | 20040722 | WO 2003-US41642 | 20031229 |
| WO 2004060347 | A3 | 20041104 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
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| US 2007015841 | A1 | 20070118 | US 2003-747742 | 20031229 |
| WO 2004078163 | A2 | 20040916 | WO 2004-US6288 | 20040226 |
| WO 2004078163 | A3 | 20050120 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, | | | |

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 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
 BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
 MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
 GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|------------------------|----|----------|------------------|-------------|
| US 2006140985 | A1 | 20060629 | US 2005-541703 | 20050708 |
| US 2006223794 | A1 | 20061005 | US 2005-551014 | 20050929 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2003-459501P | P 20030401 |
| | | | US 2003-486713P | P 20030711 |
| | | | US 2003-487064P | P 20030711 |
| | | | WO 2003-US27772 | A 20030904 |
| | | | US 2003-660202 | A 20030911 |
| | | | US 2003-747742 | A 20031229 |
| | | | WO 2003-US41642 | A 20031229 |
| | | | WO 2004-US6288 | A 20040226 |
| | | | US 2004-548343P | P 20040227 |
| | | | US 2002-356764P | P 20020215 |
| | | | US 2002-360768P | P 20020301 |
| | | | US 2002-380288P | P 20020515 |
| | | | US 2002-384152P | P 20020531 |
| | | | US 2002-390881P | P 20020621 |
| | | | US 2002-406974P | P 20020830 |
| | | | US 2002-232589 | A1 20020903 |
| | | | US 2002-426275P | P 20021114 |
| | | | US 2002-427086P | P 20021115 |
| | | | US 2002-295995 | A3 20021118 |
| | | | US 2002-428515P | P 20021122 |
| | | | US 2002-429515P | P 20021126 |
| | | | US 2002-437516P | P 20021230 |
| | | | US 2003-439282P | P 20030110 |
| | | | US 2003-439283P | P 20030110 |
| | | | US 2003-441335P | P 20030121 |
| | | | US 2003-444315P | P 20030131 |
| | | | US 2003-451213P | P 20030228 |
| | | | US 2003-378956 | A 20030303 |
| | | | WO 2003-US6662 | A 20030303 |
| | | | US 2003-456027P | P 20030318 |
| | | | US 2003-456608P | P 20030321 |
| | | | US 2003-463962P | P 20030418 |
| | | | US 2003-449307 | A2 20030530 |
| | | | US 2003-601092 | A2 20030620 |
| | | | WO 2003-US19574 | A 20030620 |
| | | | US 2003-637829 | A2 20030808 |
| | | | WO 2003-US28982 | A 20030916 |
| | | | US 2003-508208P | P 20031002 |
| | | | WO 2003-US41273 | A 20031224 |
| | | | US 2004-747742 | A1 20031229 |
| | | | WO 2003-US341642 | A 20031229 |
| | | | WO 2004-US400 | W 20040108 |
| | | | US 2004-542752P | P 20040206 |
| | | | WO 2004-US9947 | W 20040331 |

AB The invention provides novel soluble forms of olanzapine including novel salts, co-crystals, and solvates of olanzapine. Novel olanzapine forms of the invention are stable, readily formulated, and exhibit improved aqueous solubility when compared to known olanzapine forms. The invention also provides novel pharmaceutical compns. comprising these novel soluble forms

and related methods of treatment. Compns. and methods of the invention are useful in the treatment of psychosis and functional bowel disorders, including irritable bowel syndrome.

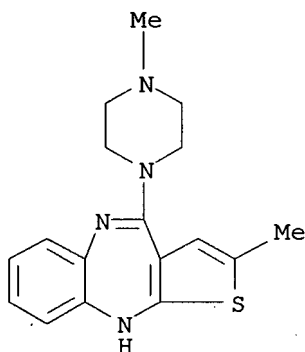
IT 132539-06-1P, Olanzapine

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(novel forms of salts, co-crystals, and solvates of olanzapine and uses in treatment of psychosis and functional bowel disorders)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



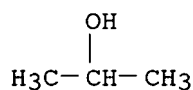
IT 67-63-0, Isopropanol, reactions 109-99-9, THF, reactions

RL: RGT (Reagent); RACT (Reactant or reagent)

(novel forms of salts, co-crystals, and solvates of olanzapine and uses in treatment of psychosis and functional bowel disorders)

RN 67-63-0 CAPLUS

CN 2-Propanol (CA INDEX NAME)



RN 109-99-9 CAPLUS

CN Furan, tetrahydro- (CA INDEX NAME)



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112 ANSWER 35 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:780550 CAPLUS

DOCUMENT NUMBER: 141:254600

TITLE: Use of secretin in the treatment of schizophrenia

INVENTOR(S): Sheitman, Brian B.; Lieberman, Jeffrey A.; Knable, Michael B.

PATENT ASSIGNEE(S): University of North Carolina at Chapel Hill, USA; The Stanley Medical Research Institute

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

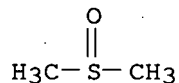
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2004080476 | A1 | 20040923 | WO 2004-US7304 | 20040311 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2007154534 | A1 | 20070705 | US 2007-548685 | 20070202 |
| PRIORITY APPLN. INFO.: | | | US 2003-453895P | P 20030312 |
| | | | WO 2004-US7304 | W 20040311 |
| AB | The treatment of schizophrenia by administration of secretin resulting in fewer side effects is provided. In another embodiment, secretin may be used to treat disorders associated with pos. or neg. symptoms, affective or neurocognitive symptoms, social dysfunction, behavioral disorders and/or disorganization, compulsive, impulsive or repetitive behaviors. | | | |
| IT | 67-68-5, DMSO, biological studies | | | |
| | RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) | | | |
| | (as transdermal carrier; use of secretin in treatment of schizophrenia) | | | |
| RN | 67-68-5 CAPLUS | | | |
| CN | Methane, 1,1'-sulfinylbis- (CA INDEX NAME) | | | |



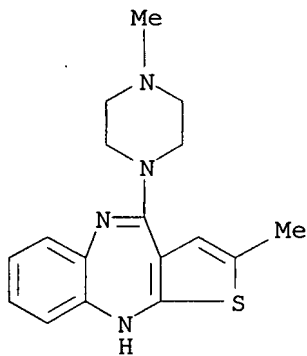
IT 132539-06-1, Olanzapine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of secretin in treatment of schizophrenia)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

112 ANSWER 36 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:566619 CAPLUS

DOCUMENT NUMBER: 141:128822

TITLE: Methods for the preparation of olanzapine hydrate and solvate crystal forms

INVENTOR(S): Dolitzky, Ben Zion; Aronhime, Judith; Diller, Dov

PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

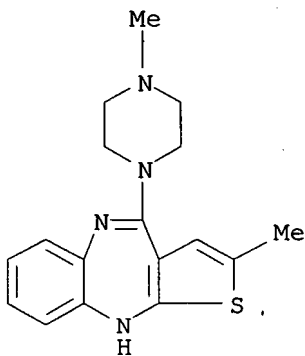
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

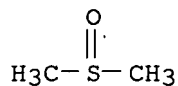
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|-------------|
| WO 2004058773 | A1 | 20040715 | WO 2003-US41123 | 20031224 |
| WO 2004058773 | A9 | 20040819 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003300324 | A1 | 20040722 | AU 2003-300324 | 20031224 |
| US 2004198721 | A1 | 20041007 | US 2003-746698 | 20031224 |
| EP 1575962 | A1 | 20050921 | EP 2003-814357 | 20031224 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| US 2007129352 | A1 | 20070607 | US 2007-649441 | 20070103 |
| PRIORITY APPLN. INFO.: | | | US 2002-435913P | P 20021224 |
| | | | US 2003-746698 | A1 20031224 |
| | | | WO 2003-US41123 | W 20031224 |
| AB | A series of novel crystalline olanzapine forms are prepared and described, in particular hydrated (e.g., olanzapine dihydrate) and solvated crystalline forms of olanzapine (e.g., olanzapine isobutanol solvate). | | | |
| IT | 132539-06-1, Olanzapine | | | |
| RL: | RCT (Reactant); RACT (Reactant or reagent) | | | |
| | (methods for the preparation of olanzapine hydrate and solvate crystal forms) | | | |
| RN | 132539-06-1 CAPLUS | | | |
| CN | 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME) | | | |



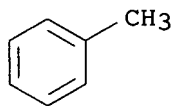
IT 75-09-2, Dichloromethane, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (methods for the preparation of olanzapine hydrate and solvate crystal forms using)
 RN 75-09-2 CAPLUS
 CN Methane, dichloro- (CA INDEX NAME)

Cl-CH₂-Cl

IT 67-68-5, DMSO, uses 108-88-3, Toluene, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (solvent; methods for the preparation of olanzapine hydrate and solvate crystal forms)
 RN 67-68-5 CAPLUS
 CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 108-88-3 CAPLUS
 CN Benzene, methyl- (CA INDEX NAME)



112 ANSWER 37 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:546512 CAPLUS

DOCUMENT NUMBER: 141:111569

TITLE: A process for the preparation of a pharmaceutically pure polymorphic form of olanzapine

INVENTOR(S): Majka, Zbigniew; Stawinski, Tomasz

PATENT ASSIGNEE(S): Adamed Sp. Z O.O., Pol.

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|------------------|------------|
| WO 2004056833 | A1 | 20040708 | WO 2003-IB5931 | 20031215 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2506663 | A1 | 20040708 | CA 2003-2506663 | 20031215 |
| AU 2003292452 | A1 | 20040714 | AU 2003-292452 | 20031215 |
| EP 1581537 | A1 | 20051005 | EP 2003-768031 | 20031215 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| BR 2003017594 | A | 20051122 | BR 2003-17594 | 20031215 |
| CN 1729195 | A | 20060201 | CN 2003-80106963 | 20031215 |
| NO 2005003368 | A | 20050711 | NO 2005-3368 | 20050711 |
| PRIORITY APPLN. INFO.: | | | PL 2002-357928 | A 20021220 |
| | | | WO 2003-IB5931 | W 20031215 |
| AB | A process for the preparation of pharmaceutically pure polymorphic form I of olanzapine comprises crystallization of olanzapine from a solution in methylene chloride, wherein before the crystallization, the solution of olanzapine in methylene chloride is treated with silica gel, preferably at reflux temperature. Also disclosed is the form I of olanzapine substantially free of a chloromethyl analog. impurity of olanzapine as well as a process for removing the impurity from the polymorphic form I. Thus, 400 g olanzapine was treated with 300 mL methylene chloride and silica gel was added to the solution and the mixture heated. After cooling to 0°, the olanzapine was filtered off and shown to be 99.92% pure. | | | |
| IT | 75-09-2, Methylene chloride, uses RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses) (process for preparation of pharmaceutically pure polymorphic form of olanzapine) | | | |
| RN | 75-09-2 CAPLUS | | | |
| CN | Methane, dichloro- (CA INDEX NAME) | | | |

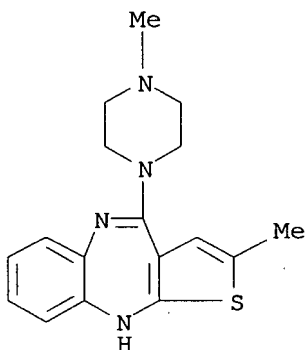
Cl-CH₂-Cl

IT 132539-06-1P, Olanzapine

RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(process for preparation of pharmaceutically pure polymorphic form of olanzapine)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



REFERENCE COUNT:

9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

L12 ANSWER 38 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:443999 CAPLUS

DOCUMENT NUMBER: 142:192430

TITLE: Fatal blood and tissue concentrations of more than 200 drugs

AUTHOR(S): Musshoff, F.; Padosch, S.; Steinborn, S.; Madea, B.

CORPORATE SOURCE: Institute of Legal Medicine, Rheinische Friedrich-Wilhelms-University, Bonn, 53111, Germany

SOURCE: Forensic Science International (2004), 142(2-3), 161-210

CODEN: FSINDR; ISSN: 0379-0738

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fatal drug concns. in body fluids and tissue samples are presented for more than 200 drugs and chems. of toxicol. interest. Addnl., a reference list is added with more than 600 original papers concerning intoxications with a lethal outcome. The data can be helpful for the interpretation and plausibility control in own cases of intoxication. However, they should be used with caution, because use of drug data without sufficient knowledge about the patient or victim, the circumstances of the case, and about toxicokinetics and toxicodynamics might give a wrong interpretation in a special case.

IT 75-05-8, Acetonitrile, biological studies 75-09-2, Dichloromethane, biological studies 132539-06-1, Olanzapine

RL: ADV (Adverse effect, including toxicity); ANT (Analyte); ANST (Analytical study); BIOL (Biological study)

(fatal blood and tissue concns. of more than 200 drugs in humans)

RN 75-05-8 CAPLUS

CN Acetonitrile (CA INDEX NAME)

H₃C-C≡N

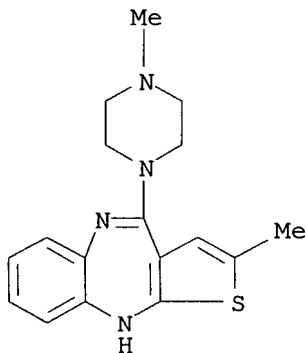
RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)

Cl-CH₂-Cl

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



REFERENCE COUNT:

615

THERE ARE 615 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

12 ANSWER 39 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:433684 CAPLUS
 DOCUMENT NUMBER: 140:429037
 TITLE: High viscosity liquid controlled drug delivery system
 and medical or surgical device
 INVENTOR(S): Gibson, John W.; Miller, Stacey S.; Middleton, John
 C.; Tipton, Arthur J.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 27 pp., Cont.-in-part of U.S.
 Ser. No. 699,002.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|-------------|
| US 2004101557 | A1 | 20040527 | US 2002-316441 | 20021210 |
| US 5747058 | A | 19980505 | US 1995-474337 | 19950607 |
| EP 1525858 | A1 | 20050427 | EP 2005-75143 | 19960607 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| CN 1781555 | A | 20060607 | CN 2005-10104020 | 19960607 |
| US 6413536 | B1 | 20020702 | US 1999-385107 | 19990827 |
| US 7053209 | B1 | 20060530 | US 2000-699002 | 20001026 |
| AU 2003200423 | A1 | 20030410 | AU 2003-200423 | 20030207 |
| WO 2004052336 | A2 | 20040624 | WO 2003-US39311 | 20031210 |
| WO 2004052336 | A3 | 20060615 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003297848 | A1 | 20040630 | AU 2003-297848 | 20031210 |
| AU 2006203112 | A1 | 20060810 | AU 2006-203112 | 20060720 |
| JP 2007126459 | A | 20070524 | JP 2006-304264 | 20061109 |
| PRIORITY APPLN. INFO.: | | | US 1995-474337 | A2 19950607 |
| | | | US 1995-478450 | B2 19950607 |
| | | | US 1997-944022 | A2 19970915 |
| | | | US 1999-385107 | A3 19990827 |
| | | | US 2000-699002 | A2 20001026 |
| | | | CN 1996-195895 | A3 19960607 |
| | | | EP 1996-921521 | A3 19960607 |
| | | | JP 1997-502181 | A3 19960607 |
| | | | AU 1998-94750 | A3 19980908 |
| | | | US 2002-316441 | A 20021210 |
| | | | AU 2003-200423 | A3 20030207 |
| | | | WO 2003-US39311 | W 20031210 |
| AB The present invention relates to novel nonpolymeric compds. and compns. that form liquid, high viscosity materials suitable for the delivery of biol. active substances in a controlled fashion, and for use as medical or surgical devices. The materials can optionally be diluted with a solvent to | | | | |

form a material of lower viscosity, rendering the material easy to administer. This solvent may be water insol. or water soluble, where the water soluble solvent rapidly diffuses or migrates away from the material in vivo, leaving a higher viscosity liquid material. 1,6-Hexanediol lactate ϵ -hydroxycaproic acid produced in was dissolved in N-methylpyrrolidone at a weight ratio of 70:30. Bupivacaine base (10%) was then added to this mixture Drops weighing approx. 100 mg were precipitated into 40

mL buffer. At 4 h; around 4.1 weight% of the bupivacaine contained in the precipitated drop had been released. At 24 h, around 8.6 weight% of the bupivacaine

had been released.

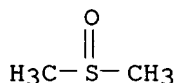
IT 67-68-5, DMSO, biological studies 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(high viscosity liquid controlled drug delivery system and medical or surgical device)

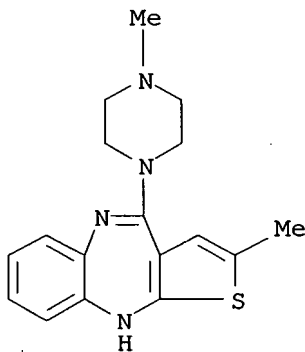
RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



10/521,646

128 ANSWER 40 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:203552 CAPLUS

DOCUMENT NUMBER: 140:253583

TITLE: Process of preparation of olanzapine form I

INVENTOR(S): Patel, Hiren V.; Ray, Anup K.; Patel, Pramod B.;
Patel, Mahendra R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S.
Ser. No. 160,958.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---------------------|----------|-----------------|-------------|
| US 2004048854 | A1 | 20040311 | US 2003-449643 | 20030530 |
| PRIORITY APPLN. INFO.: | | | US 2002-160958 | A2 20020531 |
| OTHER SOURCE(S): | CASREACT 140:253583 | | | |

AB Disclosed is a process for the preparation of polymorph form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine) by reacting (a) reacting 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine in an aprotic high boiling solvent or mixts. thereof at a temperature of between about 90 to 130°.; (b) purifying the product of step (a) in an acidic medium; (c) basifying the product of step (b) to a pH of between 7.5-9; and (d) extracting the product of step (c) using a low boiling organic solvent. Olanzapine is known as an antipsychotic agent and polymorph form I is in pharmaceutical formulations.

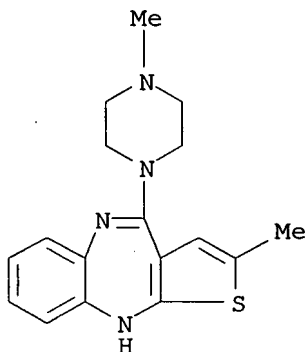
IT 132539-06-1P, Olanzapine

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process of preparation of olanzapine polymorph form I by reacting 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



IT 67-68-5, Dimethyl sulfoxide, uses 68-12-2,
Dimethylformamide, uses 75-09-2, Dichloromethane, uses

10/521,646

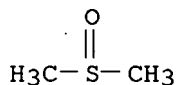
108-88-3, Toluene, uses

RL: NUU (Other use, unclassified); USES (Uses)

(solvent; process of preparation of olanzapine polymorph form I by reacting 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine)

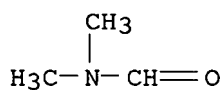
RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 68-12-2 CAPLUS

CN Formamide, N,N-dimethyl- (CA INDEX NAME)



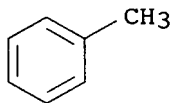
RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)



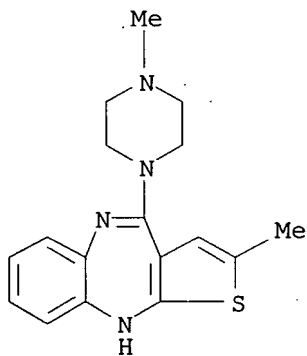
RN 108-88-3 CAPLUS

CN Benzene, methyl- (CA INDEX NAME)

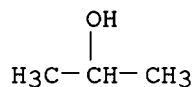


PATENT INFORMATION:

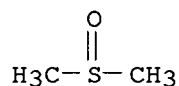
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



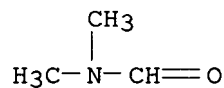
IT 67-63-0, 2-Propanol, processes 67-68-5,
 Dimethylsulfoxide, processes 68-12-2, N,N-Dimethylformamide,
 processes 75-05-8, Acetonitrile, processes 75-09-2,
 Methylene chloride, processes 108-88-3, Toluene, processes
 109-99-9, Tetrahydrofuran, processes
 RL: PEP (Physical, engineering or chemical process); PYP (Physical
 process); PROC (Process)
 (preparation of polymorphic forms of olanzapine from its solvates)
 RN 67-63-0 CAPLUS
 CN 2-Propanol (CA INDEX NAME)



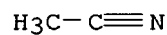
RN 67-68-5 CAPLUS
 CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 68-12-2 CAPLUS
 CN Formamide, N,N-dimethyl- (CA INDEX NAME)



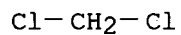
RN 75-05-8 CAPLUS
 CN Acetonitrile (CA INDEX NAME)



RN 75-09-2 CAPLUS

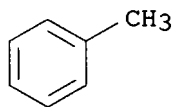
10/521,646

CN Methane, dichloro- (CA INDEX NAME)



RN 108-88-3 CAPLUS

CN Benzene, methyl- (CA INDEX NAME)



RN 109-99-9 CAPLUS

CN Furan, tetrahydro- (CA INDEX NAME)



10/521,646

L12 ANSWER 42 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:875098 CAPLUS

DOCUMENT NUMBER: 139:341733

TITLE: Novel crystalline forms of celecoxib and other compounds

INVENTOR(S): Ndzie, Elias

PATENT ASSIGNEE(S): Generics [UK] Limited, UK

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

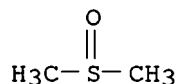
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--|----------|-----------------|------------|
| WO 2003090730 | A1 | 20031106 | WO 2002-GB1902 | 20020425 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002251329 | A1 | 20031110 | AU 2002-251329 | 20020425 |
| PRIORITY APPLN. INFO.: | | | WO 2002-GB1902 | A 20020425 |
| AB Disclosed is an organic compound in a solid crystalline form that affords the compound improved handling properties and/or improved properties as a pharmaceutical agent. The compound is preferably in the form of an adduct or solvate with an organic solvent. The compds. include celecoxib, rofecoxib, olanzapine, zafirlukast, ondansetron, clopidogrel, ticlopidine, and salts and esters thereof. For example, celecoxib DMA adduct (1:1) was prepared and its physicochem. properties, including IR spectra and x-ray diffraction pattern, were studied. | | | | |
| IT | 67-68-5, Dimethylsulfoxide, uses | | | |
| | RL: NUU (Other use, unclassified); USES (Uses) (crystalline drug solvent adducts for improved handling and physicochem. properties) | | | |
| RN | 67-68-5 CAPLUS | | | |
| CN | Methane, 1,1'-sulfinylbis- (CA INDEX NAME) | | | |



IT 132539-06-1D, Olanzapine, organic solvent adducts

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

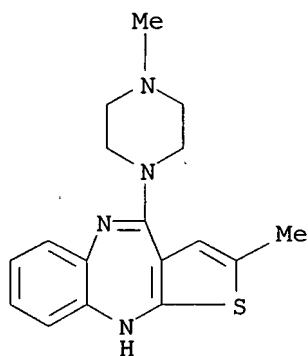
(crystalline drug solvent adducts for improved handling and physicochem. properties)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

10/521,646

(CA INDEX NAME)



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/521,646

112 ANSWER 43 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:154230 CAPLUS

DOCUMENT NUMBER: 138:210277

TITLE: Synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies

INVENTOR(S): Diamond, Scott L.; Gruneich, Jeffrey

PATENT ASSIGNEE(S): The Trustees of the University of Pennsylvania, USA

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2003015757 | A1 | 20030227 | WO 2002-US26152 | 20020815 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2456977 | A1 | 20030227 | CA 2002-2456977 | 20020815 |
| AU 2002324723 | A1 | 20030303 | AU 2002-324723 | 20020815 |
| EP 1424998 | A1 | 20040609 | EP 2002-759383 | 20020815 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | |
| JP 2005525290 | T | 20050825 | JP 2003-520717 | 20020815 |
| US 2005069577 | A1 | 20050331 | US 2004-777805 | 20040212 |
| PRIORITY APPLN. INFO.: | | | US 2001-312729P | P 20010816 |
| | | | US 2002-358138P | P 20020220 |
| | | | WO 2002-US26152 | W 20020815 |

AB The invention relates to compns. and methods for a one-step synthetic technique for making cationic steroid or cationic drug mols. for use as delivery vehicles. The invention further relates to methods for using cationic steroid mols. in lipofection or transfection, delivery of drugs, and for treatment of inflamrnation and other diseases and disorders. The invention also relates to cationic steroid prodrugs and cationic prodrugs and to methods of modifying drugs.

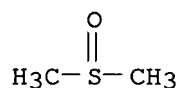
IT 67-68-5, DmsO, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

RN 67-68-5 CAPLUS

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



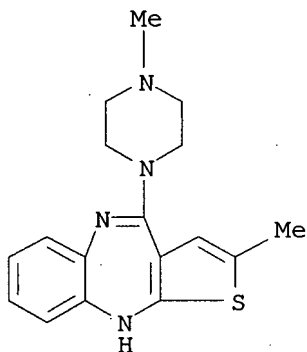
IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

112 ANSWER 44 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:555334 CAPLUS
 DOCUMENT NUMBER: 137:114525
 TITLE: Syntactic deformable pharmaceutical foam compositions
 INVENTOR(S): Odidi, Isa; Odidi, Amina
 PATENT ASSIGNEE(S): Can.
 SOURCE: PCT Int. Appl., 47 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2002056861 | A2 | 20020725 | WO 2002-CA54 | 20020117 |
| WO 2002056861 | A3 | 20021017 | | |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: | | | | |
| GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6800668 | B1 | 20041005 | US 2001-765783 | 20010119 |
| CA 2435276 | A1 | 20020725 | CA 2002-2435276 | 20020117 |
| CA 2435276 | C | 20050315 | | |
| AU 2002226223 | A1 | 20020730 | AU 2002-226223 | 20020117 |
| PRIORITY APPLN. INFO.: | | | US 2001-765783 | A 20010119 |
| | | | WO 2002-CA54 | W 20020117 |

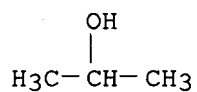
AB The invention relates to methods for preparing a syntactic foam composition suitable for use as a carrier for chems. or other compds., including pharmaceuticals. Carbopol 971P, hydroxyethyl cellulose, cellulose microspheres and silica, was mixed in a high-shear mixer. The resulting admixt. was treated with 2-propanol, while simultaneously subjecting the admixt. to high-shear forces in the high-shear mixer. This mixing created a uniform stable syntactic deformable and compressible dendritic solid foam which could be shaped before drying. Metoprolol succinate was added to the above admixt. and subjected to high-shear agitation for 2 min before treatment with 2-propanol. A stable syntactic deformable and compressible dendritic solid foam which could be shaped before drying was obtained. This was dried at 40°. The dried foam was the disentangled by size reduction to obtain discrete particles. The free flowing particles were reassembled and shaped by compression in a mold. The shaped units, when subjected to an aqueous medium, released metoprolol over a period of ≤3 h.

IT 67-63-0, 2-Propanol, uses
 RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
 (syntactic deformable pharmaceutical foam compns.)

RN 67-63-0 CAPLUS

CN 2-Propanol (CA INDEX NAME)

10/521,646

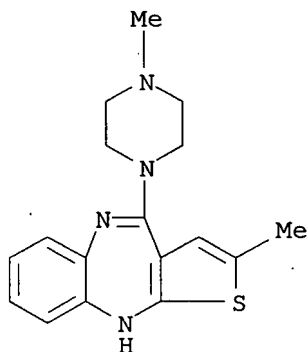


IT 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(syntactic deformable pharmaceutical foam comps.)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



~~112~~ ANSWER 45 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:487335 CAPLUS

DOCUMENT NUMBER: 137:68153

TITLE: Novel in-situ forming polymer-based controlled release microcarrier delivery systems

INVENTOR(S): Bhagwatwar, Harshal Prabhakar; Bapat, Varada Ramesh; Paithankar, Mahesh Balkrishna; Yeola, Bhushan Subhash; Gosavi, Arun Shriniwas; Bagool, Manoj Anil; Shetty, Nitin; Shukla, Milind Chintaman; De Souza, Noel John; Khorakiwala, Habil Fakhruddin

PATENT ASSIGNEE(S): India

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

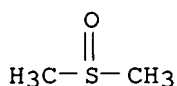
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2002049573 | A2 | 20020627 | WO 2001-IN219 | 20011214 |
| WO 2002049573 | A3 | 20030130 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2003049320 | A1 | 20030313 | US 2001-23427 | 20011212 |
| CA 2436149 | A1 | 20020627 | CA 2001-2436149 | 20011214 |
| AU 200222505 | A | 20020701 | AU 2002-22505 | 20011214 |
| EP 1363556 | A2 | 20031126 | EP 2001-271193 | 20011214 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| IN 2003MN00505 | A | 20070316 | IN 2003-MN505 | 20030512 |
| PRIORITY APPLN. INFO.: | | | US 2000-256319P | P 20001218 |
| | | | WO 2001-IN219 | W 20011214 |

AB A ready-to use, stable, gelled polymer droplet-in-oil dispersion is described which helps in in-situ formation of a multitude of small solid, semisolid, or gelled microcarriers. The dispersion is placed into a body in a semisolid form and cures to form the delivery system in-situ. The process for making such a dispersion comprises the steps of (i) dissolving a polymer in a biocompatible solvent at an elevated temperature to form a polymer solution, (ii) preparing a second oil phase solution of a biocompatible emulsifier at an elevated temperature, (iii) mixing the polymer solution with the oil phase solution at an elevated temperature and subsequently cooling to refrigeration temperature. Placing the gelled dispersion within a body produces the microcarrier delivery system in-situ. The composition of a syringeable, biodegradable dispersion incorporating an effective level of a biol. active agent before injection into a body provides a novel controlled delivery system of drugs for health-care applications. Thus, Poly(DL-lactide-co-glycolide) was dissolved in DMSO to form a polymer solution of a 30% weight/weight concentration. To this solution was added leuprolide acetate.

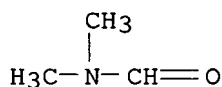
The to form a 10% weight/weight solution of the drug with respect to the polymer.

polymer solution was injected by into a continuous oil phase comprising a 20% weight/weight solution of sorbitan monostearate (Arlacel 60) in super refined sesame seed oil maintained at 70-75°, accompanied by high speed homogenization at 13,000 rpm, for 3 min. The resulting polymer droplet-in-oil dispersion was cooled to room temperature with continuous mixing to obtain an opaque mass with a gel-like consistency, which did not flow. The gel was stored under refrigerated conditions until further use. The gel was smooth to the touch with an absence of any gritty particles. Microscopic observation of the gel revealed discrete distorted blue colored droplets of the discontinuous phase dispersed within the continuous oil phase.

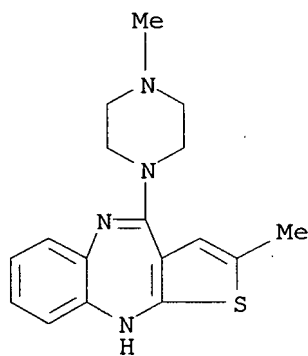
IT 67-68-5, Dimethyl sulfoxide, uses 68-12-2,
Dimethylformamide, uses
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
(in-situ forming polymer-based controlled release microcarrier delivery systems)
RN 67-68-5 CAPLUS
CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



RN 68-12-2 CAPLUS
CN Formamide, N,N-dimethyl- (CA INDEX NAME)



IT 132539-06-1, Olanzapine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in-situ forming polymer-based controlled release microcarrier delivery systems)
RN 132539-06-1 CAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



112 ANSWER 46 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:276280 CAPLUS

DOCUMENT NUMBER: 136:304024

TITLE: Method for determining chemical reactivity

INVENTOR(S): Wienkers, Larry C.; Hauer, Michael J.; Epps, Dennis E.

PATENT ASSIGNEE(S): Pharmacia & Upjohn Company, USA

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2002029416 | A2 | 20020411 | WO 2001-US27754 | 20011005 |
| WO 2002029416 | A3 | 20030116 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001096234 | A5 | 20020415 | AU 2001-96234 | 20011005 |
| US 2002110919 | A1 | 20020815 | US 2001-972520 | 20011005 |
| US 6979545 | B2 | 20051227 | | |

PRIORITY APPLN. INFO.:

US 2000-238238P P 20001005

WO 2001-US27754 W 20011005

AB A process for screening chemical compds. for electrophilic properties comprising the steps of: (a) providing an assay having one or more reaction vessels; (b) adding a predetd. amount of sep. chemical compds. for screening to each reaction vessel; (c) adding a predetd. amount of a surrogate chemical marker to each reaction vessel and allowing said sep. chemical compds. and surrogate chemical marker to incubate for a period of time;

(d) adding a reactive chemical to each reaction vessel which is capable of reacting with residual surrogate chemical marker such that the amount of residual surrogate chemical marker present after step (c) can be quant. or qual. measured; and (e) quant. or qual. measuring said residual chemical marker is provided. In particular, the invention provides a high throughput toxicity screening method for pharmaceutically active mols.

IT 108-88-3, Toluene, biological studies 132539-06-1,

Olanzapine

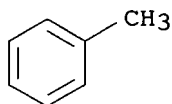
RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)

(method for determining chemical electrophilic reactivity using reactive chems.

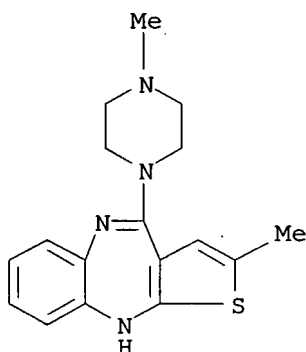
and surrogate chemical markers using solvents in relation to drug toxicity screening)

RN 108-88-3 CAPLUS

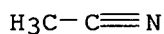
CN Benzene, methyl- (CA INDEX NAME)



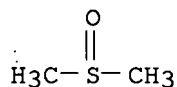
RN 132539-06-1 CAPLUS
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
 (CA INDEX NAME)



IT 75-05-8, Acetonitrile, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (solvent; method for determining chemical electrophilic reactivity using
 reactive chems. and surrogate chemical markers in solvents in relation to
 drug toxicity screening)
 RN 75-05-8 CAPLUS
 CN Acetonitrile (CA INDEX NAME)



IT 67-68-5, DMSO, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (solvent; method for determining chemical electrophilic reactivity using
 reactive chems. and surrogate chemical markers using solvents in relation
 to drug toxicity screening)
 RN 67-68-5 CAPLUS
 CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



112 ANSWER 47 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:171904 CAPLUS

DOCUMENT NUMBER: 136:221739

TITLE: Process for preparation of hydrates of olanzapine and their conversion into crystalline forms of olanzapine

INVENTOR(S): Koprowski, Robert; Reguri, Buchi Reddy; Chakka, Ramesh

PATENT ASSIGNEE(S): Reddy's Laboratories Ltd., India

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2002018390 | A1 | 20020307 | WO 2001-US7258 | 20010307 |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: | | | | |
| GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| IN 190895 | A1 | 20030830 | IN 2000-MA711 | 20000831 |
| IN 191714 | A1 | 20031220 | IN 2000-MA709 | 20000831 |
| CA 2420987 | A1 | 20020307 | CA 2001-2420987 | 20010307 |
| AU 200143475 | A | 20020313 | AU 2001-43475 | 20010307 |
| EP 1313742 | A1 | 20030528 | EP 2001-916449 | 20010307 |
| R: | | | | |
| AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| BR 2001014031 | A | 20030909 | BR 2001-14031 | 20010307 |
| HU 200300875 | A2 | 20031229 | HU 2003-875 | 20010307 |
| JP 2004507548 | T | 20040311 | JP 2002-523905 | 20010307 |
| NO 2003000926 | A | 20030424 | NO 2003-926 | 20030227 |
| ZA 2003001640 | A | 20040203 | ZA 2003-1640 | 20030227 |
| MX 2003PA01827 | A | 20041101 | MX 2003-PA1827 | 20030228 |
| US 2004067936 | A1 | 20040408 | US 2003-363436 | 20031120 |
| PRIORITY APPLN. INFO.: | | | IN 2000-MA709 | A 20000831 |
| | | | IN 2000-MA711 | A 20000831 |
| | | | WO 2001-US7258 | W 20010307 |

AB The present invention relates to a method for the preparation of hydrates of olanzapine. The present invention also relates to a process for conversion of these hydrates into a pure crystalline form of olanzapine referred to as form-1. The present invention also relates to a method of converting olanzapine form-2 to form-1. Thus, a mixture of 4-amino-2-methyl-10H-thieno-[2,3-b][1,5]benzodiazepine-HCl, N-methylpiperazine, DMSO, and toluene was heated under reflux, the mixture was cooled, and water was added. The olanzapine that was separated was dried to give a product with a moisture content of 5.22%.

IT 67-68-5, DMSO, uses 75-09-2, Methylene chloride, uses 108-88-3, Toluene, uses

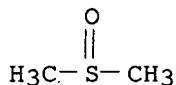
RL: NUU (Other use, unclassified); USES (Uses)

(preparation of hydrates of olanzapine and their conversion into crystalline forms of olanzapine)

RN 67-68-5 CAPLUS

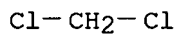
10/521,646

CN Methane, 1,1'-sulfinylbis- (CA INDEX NAME)



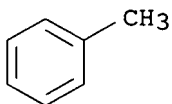
RN 75-09-2 CAPLUS

CN Methane, dichloro- (CA INDEX NAME)



RN 108-88-3 CAPLUS

CN Benzene, methyl- (CA INDEX NAME)



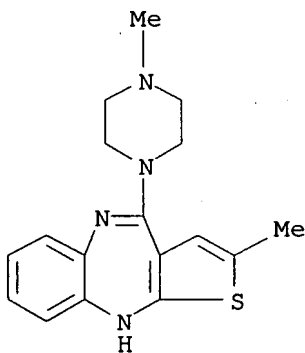
IT 132539-06-1P, Olanzapine

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hydrates of olanzapine and their conversion into crystalline
forms of olanzapine)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



REFERENCE COUNT:

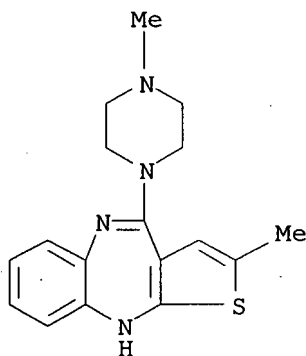
3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

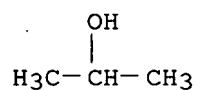
IN2 ANSWER 48 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:725436 CAPLUS
 DOCUMENT NUMBER: 133:301171
 TITLE: Compositions and methods for improved delivery of
 ionizable hydrophobic therapeutic agents
 INVENTOR(S): Chen, Feng-jing; Patel, Manesh V.
 PATENT ASSIGNEE(S): Lipocine, Inc., USA
 SOURCE: PCT Int. Appl., 99 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|---|----------|-----------------|------------|
| WO 2000059475 | A1 | 20001012 | WO 2000-US7342 | 20000316 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6383471 | B1 | 20020507 | US 1999-287043 | 19990406 |
| CA 2366702 | A1 | 20001012 | CA 2000-2366702 | 20000316 |
| EP 1165048 | A1 | 20020102 | EP 2000-916547 | 20000316 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRIORITY APPLN. INFO.: | | | US 1999-287043 | A 19990406 |
| | | | WO 2000-US7342 | W 20000316 |
| AB | The present invention is directed to a pharmaceutical composition including a hydrophobic therapeutic agent having at least one ionizable functional group, and a carrier. The carrier includes an ionizing agent capable of ionizing the functional group, a surfactant, and optionally solubilizers, triglycerides, and neutralizing agents. The invention further relates to a method of preparing such compns. by providing a composition of an ionizable hydrophobic therapeutic agent, an ionizing agent, and a surfactant, and neutralizing a portion of the ionizing agent with a neutralizing agent. The compns. of the invention are particularly suitable for use in oral dosage forms. A carrier containing concentrated phosphoric acid 0.025, Tween-20 0.3, Arlacel 186 0.2, sodium taurocholate 0.15, propylene glycol 0.3 g was formulated. Itraconazole was included in the carrier at 30 mg/mL for testing the stability of the itraconazole solution upon dilution in simulated gastric fluid. | | | |
| IT | 132539-06-1, Olanzapine RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing hydrophobic therapeutic agents and carriers containing ionizing agents and surfactants and triglycerides) | | | |
| RN | 132539-06-1 CAPLUS | | | |
| CN | 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME) | | | |



IT 67-63-0, Isopropanol, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (solubilizer; pharmaceutical compns. containing hydrophobic therapeutic
 agents and carriers containing ionizing agents and surfactants and
 triglycerides)
 RN 67-63-0 CAPLUS
 CN 2-Propanol (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

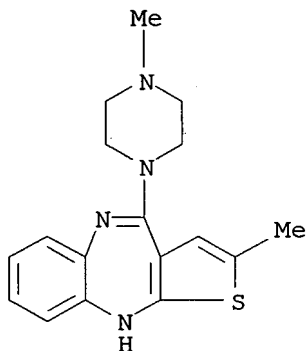
L12 ANSWER 49 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:400460 CAPLUS
 DOCUMENT NUMBER: 127:70833
 TITLE: Solvate of olanzapine
 INVENTOR(S): Larsen, Samuel D.
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Lilly Industries Ltd.
 SOURCE: U.S., 8 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 5637584 | A | 19970610 | US 1995-410263 | 19950324 |
| PRIORITY APPLN. INFO.: | | | US 1995-410263 | 19950324 |
| AB A methylene chloride solvate of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (I) which is useful for the desired anhydrous form is provided. Thus, 5.0 g of tech. grade I was suspended in methylene chloride and heated to about 30° for 30 min, then chilled to 5° and the product thus obtained was isolated by vacuum filtration. | | | | |
| IT 75-09-2, Methylene chloride, uses RL: NUU (Other use, unclassified); USES (Uses) (solvate of olanzapine) | | | | |
| RN 75-09-2 CAPLUS | | | | |
| CN Methane, dichloro- (CA INDEX NAME) | | | | |

Cl-CH₂-Cl

IT 132539-06-1, Olanzapine
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (solvate of olanzapine)
 RN 132539-06-1 CAPLUS
 CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
 (CA INDEX NAME)



L12 ANSWER 50 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:324780 CAPLUS

DOCUMENT NUMBER: 127:5106

TITLE: Preparation of 2-methylthienobenzodiazepine as central nervous system agent.

INVENTOR(S): Chakrabarti, Jiban K.; Hotten, Terrence M.; Tupper, David E.

PATENT ASSIGNEE(S): Lilly Industries Ltd., UK

SOURCE: U.S., 11 pp., Cont.-in-part of U.S. Ser. No. 44,844, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

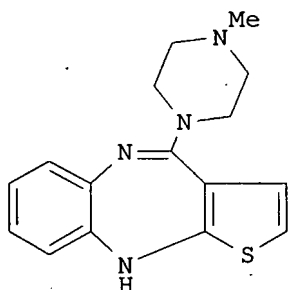
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5627178 | A | 19970506 | US 1995-387997 | 19950213 |
| US 5229382 | A | 19930720 | US 1992-890348 | 19920522 |
| US 5817655 | A | 19981006 | US 1996-748292 | 19961113 |
| US 6008216 | A | 19991228 | US 1998-122294 | 19980724 |
| PRIORITY APPLN. INFO.: | | | US 1991-690143 | B1 19910423 |
| | | | US 1992-890348 | A2 19920522 |
| | | | US 1993-44844 | B2 19930408 |
| | | | GB 1990-9229 | A 19900425 |
| | | | US 1995-387997 | A2 19950213 |
| | | | US 1996-748292 | A3 19961113 |

GI



I

AB 2-Methyl-4-(4-methyl-1-piperazinyl)-10H-thieno-[2,3-b][1,5]benzodiazepine (I), or an acid salt thereof, has pharmaceutical properties, and is of particular use in the treatment of disorders of the central nervous system. Compound I is used in the treatment of schizophrenia, catatonic, delusional disorder, brief reactive psychosis, manic depression, anxiety disorder, post-traumatic stress disorder, obsessive compulsive disorder, delusions, hallucinations, and disorganized behavior. Thus, 4.3g of 4-amino-2-methyl-10H-thieno[2,3-b]benzodiazepine hydrochloride (preparation given) was relaxed in a mixture of 15 mL of N-methylpiperazine, DMSO, and toluene for 20 h to give 1.65g I. Formulations containing I were described.

IT 132539-06-1P

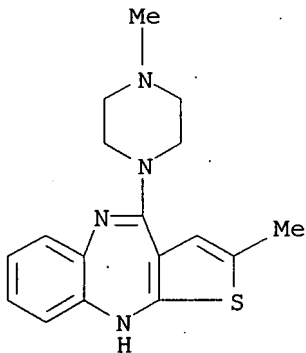
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

10/521,646

(preparation of 2-methyl-thieno-benzodiazepine as central nervous system agent)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
(CA INDEX NAME)



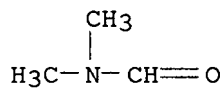
IT 68-12-2, Dimethylformamide, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 2-methyl-thieno-benzodiazepine as central nervous system agent)

RN 68-12-2 CAPLUS

CN Formamide, N,N-dimethyl- (CA INDEX NAME)



112 ANSWER 51 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:383592 CAPLUS

DOCUMENT NUMBER: 122:197139

TITLE: Comparison of theory-based and empirical modeling for the prediction of chromatographic behavior in the ion-pairing separation of benzodiazepine-derived pharmaceutical compounds

AUTHOR(S): Larew, Larry A.; Olsen, Bernard A.; Stafford, John D.; Wilhelm, Melinda V.

CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly and Company, P.O. Box 685, Drop Code TL12, Lafayette, IN, 47902, USA

SOURCE: Journal of Chromatography, A (1995), 692(1 + 2), 183-93

CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Two approaches were examined for predicting chromatog. behavior during the reversed-phase ion-pairing separation of benzodiazepine-derived pharmaceutical compds. The capacity factor for olanzapine and its resolution from a closely related compound, desmethylolanzapine, were studied as a function of the percentage of acetonitrile, the ion-pairing reagent concentration and the buffer

pH. In the first approach, the results were analyzed using the theory-based software package DryLab I/mp. In the second approach, statistical anal. was used to derive empirical equations to predict the dependence of the chromatog. behavior on each of the exptl. variables. At the lowest ion-pairing reagent concentration, DryLab I/mp was found to be a poor

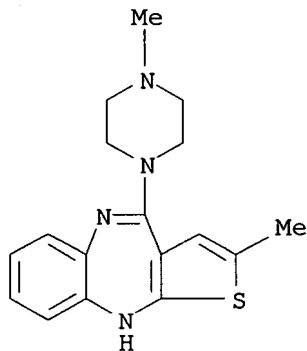
predictor of resolution. For this complex separation, the empirical equations derived from the statistical anal. were found to predict better the chromatog. behavior over the ranges tested. These equations were used to generate response-surface plots to evaluate the method ruggedness.

IT 132539-06-1, Olanzapine

RL: ANT (Analyte); PRP (Properties); ANST (Analytical study) (modeling of chromatog. behavior in ion-pairing separation of benzodiazepine derivs.)

RN 132539-06-1 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



IT 75-05-8, Acetonitrile, uses

10/521,646

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(modeling of chromatog. behavior in ion-pairing separation of benzodiazepine
derivs.)

RN 75-05-8 CAPLUS

CN Acetonitrile (CA INDEX NAME)

